

## SUPPLEMENT

TO THE

FORTY-FOURTH ANNUAL REPORT OF THE DEPARTMENT OF MARINE  
AND FISHERIES FOR THE CALENDAR YEAR ENDING  
31<sup>ST</sup> DECEMBER, 1910.

## MARINE

## REPORTS

OF THE

## HARBOUR COMMISSIONERS

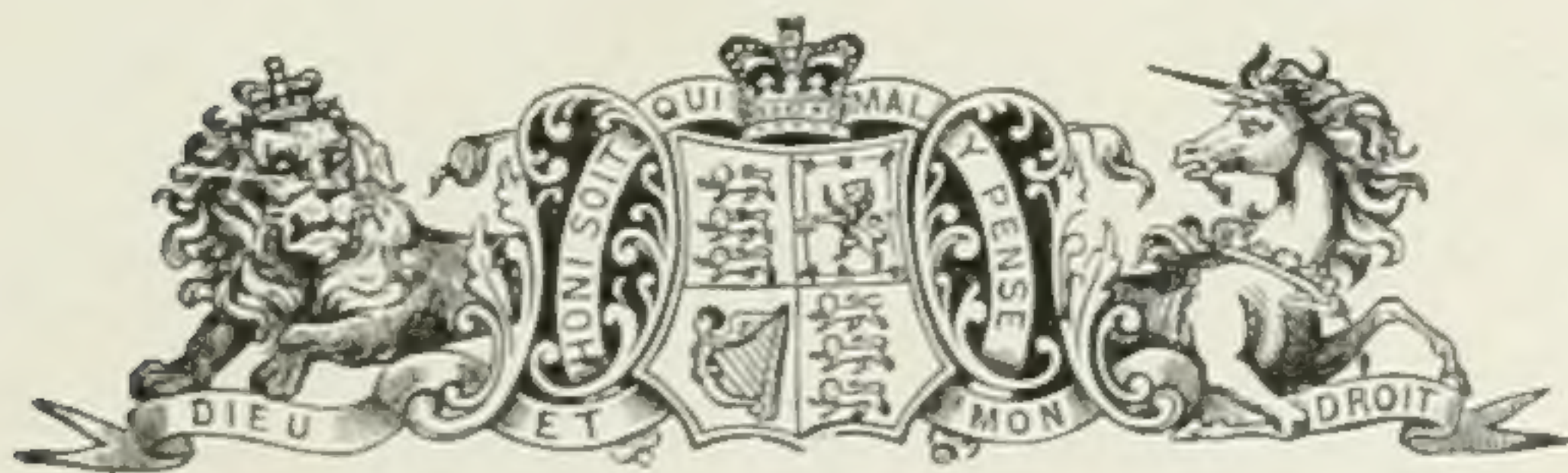
FOR

MONTREAL, QUEBEC, THREE RIVERS, TORONTO, NORTH SYDNEY,  
PICTOU AND BELLEVILLE.

REPORTS OF PILOTAGE AUTHORITIES.

REPORTS OF PORT WARDENS, SHIPPING-MASTERS AND OF WRECKS  
AND CASUALTIES.

CHIEFLY UP TO THE

31<sup>ST</sup> DAY OF DECEMBER, 1910.*Printed by Order of Parliament.*

OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY

1911.







OTTAWA, MAY, 1911.

HON. J. D. HAZEN,  
Minister of Marine and Fisheries.

SIR,—I have the honour to submit herewith, the supplement to the Forty-fourth Annual Report of the Marine branch of the Department of Marine and Fisheries, being for the year 1910, and containing reports of the Harbour Commissioners of Montreal, Quebec, Belleville, Three Rivers, North Sydney and Pictou; reports of pilotage authorities; reports of port wardens; reports of shipping masters and report of wrecks and casualties.

I have the honour to be, sir,  
Your obedient servant,

ALEX. JOHNSTON,  
*Deputy Minister of Marine and Fisheries.*







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## APPENDIX No. 1.

ANNUAL REPORTS OF THE HARBOUR COMMISSIONERS OF MONTREAL  
FOR THE YEAR 1910.*Report of the operations carried out by the Harbour Commissioners of  
Montreal, 1910.*

HON. L. P. BRODEUR, K.C., M.P.,  
Minister of Marine and Fisheries,  
Ottawa, Ont.

Sir,—

The commissioners have the honour to submit their Annual Report for the year 1910, which they trust will meet with your approval, and desire to thank you for your kind appreciation and for the hearty support and co-operation of the officers of your department.

You will recall that on assuming the responsibility of administration in the Port of Montreal, the commissioners undertook the careful study of port conditions in Europe and United States, with a view of assembling the necessary information which might enable them to lay down on broad lines a development of Canada's national port which would meet the growing necessities of Canadian commerce.

The first step taken was the invitation extended to Mr. R. C. H. Davison, of London, England, to come to the port and study on the spot itself the working conditions, and submit to the commissioners his views with reference to the lines upon which future improvements should be carried out. The summer of 1907 was devoted to this investigation and early in 1908 this expert's report was made to the Commissioners.

The second step was made when the commissioners authorized their president and Chief Engineer to proceed to Europe at the beginning of 1908 and study the continental port development and that of Great Britain. Four months were consecrated to this work, and on the 1st May, 1908, a report covering the investigations made was completed.

The commissioners thereupon authorized their Chief Engineer, Mr. F. W. Cowie, to prepare a scheme of port development, making use of the splendid information that this European trip had afforded. The years 1908 and 1909, up to the month of June of the latter year, were devoted by the Chief Engineer and Harbour staff to this work.

The commissioners now found themselves in possession of two complete schemes of Port development, which they decided to submit to a Board of Canadian Engineers, composed of the following:—

John Kennedy.  
Louis Coste.  
Ernest Marceau.

Henry Holgate.  
G. J. Desbarats.  
A. St. Laurent.

This Board, during the latter part of 1909, deliberated upon the merits of the schemes presented, and submitted a unanimous report in favour of the Port development scheme planned and devised by Mr. Cowie, Chief Engineer, which, by your kind concurrence, was approved at Ottawa and the money necessary for the first unit of this progressive scheme voted unanimously by the Dominion Parliament sitting in the spring of 1910.



This year's annual report, therefore, will chronicle the beginning of a port development scheme extending over a term of twelve years, of which each yearly unit is planned to be a harmonious part of a completed whole.

On 1st May, 1910, the entire administration set to work with energy and unity of purpose that has made possible during the past seven months the completion of the biggest year's work in the history of the port.

A high level railway has been constructed and is now in operation from Victoria Pier to Molson's Creek. This places your commissioners in the position to operate the harbour railway terminals for twelve months instead of seven, and already enough winter business has been contracted for to warrant and justify the expenditure made upon this railway.

Twelve subway approaches to the Harbour have been built and are open to the public, replacing a similar number of level crossings, thus over the congested area of the port the vehicular and passenger traffic have been largely separated from the railway, contributing therefore to the great efficiency of both and lessening the danger of accidents.

Grain Elevator No. 2, with a nominal storage capacity of 2,000,000 bushels was started on the 27th day of July and is being erected by the commission itself, under the superintendence of Mr. John S. Metcalf. Since that date, piles have been driven and the foundations up to the first storey are completed. The winter months will be devoted to building the wooden forms, storey by storey, so that next year's work will, with reasonable luck, see the roof on the elevator, and the 1st May, 1912, will, it is hoped, see the completion of this elevator ready to handle the increased grain business, which will provide additional efficient equipment for the Port of Montreal in answer to the great needs of the Canadian West.

The enlargement of the Victoria Pier, the creation of a much needed Market Basin for river craft, has advanced perceptibly and the development at this point will give, when completed, a low level quay length of some 4,800 lin. ft. on the inside of the basin, and five ocean berths built to high level for the accommodation of large tonnage vessels coming to the Port on the outer side.

On the 30th May, 1910, an agreement was reached between the firm of Vickers Sons & Maxim Limited, and the harbour commissioners justifying the beginning of a dry dock site at Molson's Creek. At this point will be created from channel dredgings an area of land comprising thirty acres, with a protected basin for the reception of the floating dry dock, and the establishment, if necessary, of a high level coal handling terminal in the eastern part of the city.

The permanent concrete wharf extension planned for the Dominion Coal Co. at Hochelaga has also been completed.

The usual amount of harbour dredging and constructional work has been undertaken by the commissioners under the Engineering Department, and has been in every way satisfactory.

#### NEW STEAMSHIP LINES.

A new first-class steamship service was inaugurated by the Canadian Northern Steamships Limited, connecting Montreal with the port of Bristol, the steamships "Royal George" and "Royal Edward", 12,000 tons each, carrying on a fortnightly service between the ports. These splendid ships have earned a reputation for themselves on the St. Lawrence route, and the Bristol-Montreal passenger service has been amongst the most popular of the year.

This passenger connection with the port of Bristol, in the south of England, lands passengers within two hours rail distance of London, and taps a freight consuming area of 10,000,000 people within one hundred miles radius of Bristol, London excluded. This puts Canadian and Bristol merchants in touch with one another



## SESSIONAL PAPER No. 23

and opens to Canadian commerce a market of 10,000,000 people within six days from the Port of Montreal to Bristol and vice versa. Excellent first-class accommodation has been provided at Bristol and the prospect is that this service will grow more and more important every year.

The Glasgow route was strengthened by the S. S. "Saturnia," of the Donaldson Line, while the Canadian Pacific Railway Company inaugurated the New Zealand-Australia service, which also proved eminently satisfactory.

## SAFETY OF THE ST. LAWRENCE SHIP CHANNEL.

The season of 1910 proved to be one of the driest seasons for a long term of years, in consequence of which the depth of water in the channel reached its lowest at an earlier point in the season than is usual. Notwithstanding this fact, all through the summer and as late as the month of November, night navigation has been practised by ships belonging to all lines, and the safety and the lighting of the channel has been practically demonstrated to the great satisfaction of the shipping agents.

## ENTERTAINMENT OF DISTINGUISHED GUESTS.

During the year the commissioners were honoured by the visit of the following distinguished men:—

His Excellency Lord Grey, Governor-General of Canada, showed his great interest in the port's development by coming down from Ottawa specially to inspect the Port, and was taken over the railway in a private car.

Lord Brassey visited the port in his own yacht "Sunbeam" and was entertained by the commissioners.

The most interesting delegation of visitors was a special contingent of Bristol merchants sent out by the Chamber of Commerce of that city to visit Canada. They were met at Quebec and transferred from the "Royal George" to the C.G.S. "Lady Grey" and brought up the river to Montreal. In this way they saw to the best advantage the St. Lawrence River and ship channel work of the dredges and the aids to navigation, at the magnitude of which they were both surprised and satisfied. Their stay in the City of Montreal was made pleasant by the City of Montreal, Board of Trade, Chambre de Commerce and the Harbour Commissioners. The delegation proceeded westward and returned home by way of Montreal at a later date, delighted with what they had seen, and carrying home enthusiastic belief in the greater development of commerce between the two ports.

The commissioners were also honoured by a visit from the entire Toronto City Council, who spent the best part of a day in looking over the harbour facilities in the port, with which they were all pleased.

The inauguration of the new high level railway, and its completion to Molson's Creek, was made the occasion of an inspection by the commercial bodies of the city, largely attended.

## ADMINISTRATION.

The carrying on of the construction work under the different departments concurrently with the increased volume of import and export business, has tested the ability of the several staffs to their utmost. The commissioners are pleased to record their satisfaction with the manner in which the needs of the port have been attended to in such an efficient manner notwithstanding the specially trying circumstances.

It will therefore be seen that the year 1910 has been the largest, both in financial and construction business, that the port has yet had to record.

## GRAIN TRADE.

The conditions for the exportation of grain from America to Europe have this year not been favourable, the consuming power and prices on this continent



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having ruled so high during the larger portion of the season as to make it more advantageous to market the grain on this side than to export it. In face of these adverse conditions, however, the commissioners are pleased to advise the steady growth of the grain trade through the port of Montreal, Grain Elevator No. 1 having handled 14,000,000 bushels.

Early in the season the arrival of lake boats carrying grain threatened to congest at this point the handling power of the harbour through the withdrawal by the Montreal Grain Elevating Co. of their entire fleet of floating grain elevators.

At the request of the grain trade the commissioners remedied this condition by purchasing and operating the fleet. Although the volume of grain handled by this newly acquired elevator capacity has been disappointing to the commissioners, it is, nevertheless, apparent that the taking over of this fleet and its operation was a wise move and one that was appreciated by the Corn Exchange. These floating elevators will be available for the relief of any congested period in 1911 and until the completion of Grain Elevator No. 2, which it is hoped will be in operation on 1st May, 1912. When completed this elevator will have a handling capacity of 1,000,000 bushels per day in and out, and will be able to discharge simultaneously from two vessels at the same time, in addition to its receiving and shipping facilities by car and conveyor.

#### ELGIN BASIN SEWER.

For many years the discharging of city sewage into the still water basins of the harbour has been a menace to health and a nuisance to everybody. Thanks to the courtesy of the City Controllers, after several conferences upon this problem, an arrangement providing for a joint investigation and report has been come to without prejudice to the rights of either party, and it is hoped that this report will point the way for the removal of this nuisance at an early date.

#### PAYMASTER'S DEPARTMENT.

This department has had the busiest year in its history, due to the large amount of development work in process. Its operations have been carried on efficiently and satisfactorily. The periodical inspections made by the commissioners' auditors during the season have shown that every possible care has been used in its administration.

#### FIRE PROTECTION.

Under this head it is to be noted that the growing popularity of the upper storeys of the sheds concentrates at one time upon the wharves a very much larger portion of merchandise than heretofore has been the case. While every precaution possible is taken by the commissioners to ensure the safety from destruction of valuable cargo, the need, however, exists for providing, both from the water and land side, more complete appliances to meet emergencies that may arise. The early acquisition of a powerful fire tug and the doubling of the water mains connected with the hydrants, so as to ensure adequate water pressure, has been the subject of several conferences between the city and the commissioners. It is hoped that these important matters will receive early and satisfactory attention.

#### WIDENED PORTION OF COMMON AND COMMISSIONERS STREETS.

This strip of land, comprising about 600,000 square feet and running from the foot of McGill Street to Bonsecours Market, has been the subject of eight years litigation between the City, the Montreal Street Railway and the commissioners. The Court of Appeal have established by unanimous judgment, delivered in November last, that this part of Common and Commissioners Streets is the property of the harbour commissioners, and that the street railway tracks have been illegally using part of the thoroughfare for the past eight years.

This decision is of very great importance inasmuch as the part under dispute will be needed in the near future to relieve the congested state of the central harbour.



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## CITY OF MONTREAL.

There have been many subjects of mutual interest between the City of Montreal and the commissioners that have been made the subject of several earnest conferences in an attempt to adjust these matters of long outstanding dispute.

It is a pleasure for your commissioners to state that they have been met with the utmost courtesy by His Worship the Mayor, the controllers and aldermen, and trust all matters unadjusted will in a short time be satisfactorily settled by mutual negotiation.

The matters discussed during the present year concerned the policing, fire protection, Elgin Basin Sewer and the new wharf at St. Helen's Island.

## PURCHASING DEPARTMENT.

This department has been carried on as in the past three years under a specially appointed purchasing agent, whose duties have been performed in a satisfactory manner, and in the administration of this department considerable economies have been effected.

## SAW MILL.

The commissioners' sawmill has been working continuously all through the season, and as usual has been the means of making a substantial saving in the service of this department.

## TRAFFIC DEPARTMENT.

As you are aware under this department is handled the entire freight business of all the railways in business relationship with the port. This department, this year, has been taxed very severely because in addition to keeping up the standard of public service constructional work on the new high level railway has congested the port's rail business to a very marked degree.

Notwithstanding this, not a single complaint reflecting on the efficiency of the department has reached the commissioners.

Two new locomotives were purchased during the season to cope with the increased business, and the erection of a locomotive house and repair shops for the rolling stock is now in course of completion on harbour property.

## FLOATING CRANE.

Use has been made of the large floating crane this year more than ever, and it has been found a great acquisition in attracting to the port of Montreal heavy class freight which otherwise could not be handled.

## NEW PLANT.

The constructional work undertaken has necessitated the acquisition of considerable new plant.

A new dredge, known as No. 5, has been added to the fleet of dredges, tenders having been called for the hull and boiler, the machinery having been installed by the commissioners' own mechanical department; and it is hoped that this dredge will add very materially to the efficiency of the fleet.

Two large earth excavators have been purchased and have completed their first year's work in a satisfactory manner. A new light draught twin screw steel tug is being built for the commissioners at Sorel by La Cie Pontbriand, Ltée, and a powerful ice-breaking inspection tug is being built by Vickers Sons & Maxim for service in the harbour in dislodging the ice in the early spring, to be used during the summer for inspection, wrecking and towing purposes.

The electric hoist established at shed No. 12, with a capacity of fifteen tons, has proved a satisfactory experiment in giving access to the upper storeys of the sheds, as a fully loaded team is taken up with ease and safety.



## APPLICATIONS FOR SHEDS.

Although fourteen steel double deck sheds have only been in use three years, the demand for further shed space has largely exceeded the supply.

The commissioners have in contemplation the erection of four permanent sheds on the Tarte Pier in the east end of the city, each of which will be allotted for permanent use upon completion, and the five new ocean berths in the centre of the harbour on the outer side of the Victoria Pier will increase the first-class ocean accommodation and relieve temporarily at least, the congestion for this kind of accommodation.

This huge area of first class warehousing accommodation, with railway access at all times on equal conditions to all railways, must surely commend itself to the business interests of the country.

## INSURANCE RATES.

Altogether the most serious handicap placed upon Canadian business through the port of Montreal is the excessive insurance rates levied upon hulls and cargoes, particularly during the opening and closing months of the season.

In view of the expenditure upon aids to navigation in the St. Lawrence, and the deepening and widening of the channel, we may reasonably hope for a considerable betterment in insurance rates for St. Lawrence business. Not the least among the elements that will bring this about is the establishment of adequate dry dock accommodation in the river, so as to protect the invested capital in ships now doing business in the St. Lawrence trade and the ships of larger and greater tonnage that are contemplated.

The commissioners, in co-operation with other interests, are endeavouring to bring this about, and satisfactory results are hoped for in the near future.

From a competitive point of view this is the greatest handicap existing at present and should be remedied with the least possible delay.

The commissioners know that they have your cordial and constant support in this matter, and should it be brought about it will largely be due to the deep interest you have taken in the St. Lawrence route.

## REVENUE.

This year's revenue, as will be seen from the Secretary-Treasurer's summarized statement of operations, exceeds that of last year by \$107,055.06.

The commissioners desire to direct your attention to the loyalty and efficiency of the harbour administrative staff in all its departments, to which spirit is largely due the most successful constructional year in the history of the port, and the year to whose credit must go the largest amount of business, the greatest revenue, and the greatest tonnage.

The engineering department has been particularly taxed in the amount of work actually accomplished in the short season; the traffic department has shown its ability to handle an increased business under most trying circumstances; the office staff, upon whose shoulders has fallen the additional burden of increases in other directions, has been tested. The shipyard and mechanical department have met a very large increase in the volume of demands upon them with efficiency and despatch. The different units of administration have worked in harmony one with the other, and as a tribute to the administrative efficiency it may be pardonable to quote from an outside authority regarded as among the highest, what a close unbiased study of the conditions in the port of Montreal from an administrative standpoint reveals.

In the edition of "Waterway" of October last, appears a report of an address delivered by Mr. Calvin Tomkins, Commissioner of Docks and Ferries of the port



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of New York, on "Terminal Facilities required for the successful co-ordination of rail and water traffic," in which the following statement appears:—

"I believe at the present time that Montreal, while suffering from the disadvantage of ice obstruction in the winter time, nevertheless affords the best example of modern seaport organization. Unity of control, opportunity for expansion and a carefully prepared plan which permits of such expansion for generations to come, adequate articulation of land and water factors, and co-ordination of their uses under intelligent supervision, have had the effect of here bringing into most effective operation all of the separate factors which, combined, best serves the terminal needs of a seaport community."

The commissioners have great pleasure in expressing their appreciation to the City of Montreal, the Board of Trade, the Chambre de Commerce, Corn Exchange, Cartage Companies, Shipping Federation and Stevedores and Longshoremen for cordial co-operation in the year's work, and desire to thank you, as Minister of Marine and Fisheries, for your unstinted support and counsel in the many problems that have had to be solved.

The whole respectfully submitted.

G. W. STEPHENS,  
President.

L. E. GEOFFRION,

C. C. BALLANTYNE,  
Commissioners



1-2 GEORGE V., A. 1911

REPORT OF SECRETARY-TREASURER OF THE HARBOUR  
COMMISSIONERS OF MONTREAL, FOR THE YEAR  
ENDING 31st DECEMBER, 1910.

APRIL 8TH, 1911.

ALEX. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa, Ont.

Sir,—

I have the honour, by direction of the commissioners, to forward herewith, for the information of the Honourable the Minister of Marine and Fisheries, summarized statement of the operations of the Corporation for the year ended 31st December, 1910.

The receipts on Revenue Account as compared with 1909 were as follows:—

	1910	1909
Wharfages on Imports.....	\$258,996 20	\$208,927 55
Wharfages on Exports.....	94,077 34	97,733 00
Wharfages on Local Traffic.....	86,798 76	75,636 58
Switching Cars. ....	124,801 79	104,266 43
Rentals, Harbour Sheds. ....	100,599 97	101,500 00
Grain Elevator No. 1. ....	92,428 55	65,987 90
Rentals, Harbour Tracks and Properties. ....	34,057 29	31,351 70
Floating Crane. ....	3,067 32	2,369 00
	<hr/>	<hr/>
	\$794,827 22	\$687,772 16

In May, 1910, the commissioners purchased the floating grain elevators of the Montreal Grain Elevating Company, and operated the same from which a new source of revenue, amounting to \$41,287.95, was obtained.

This amount, added to the \$794,827.22 above noted, makes the total revenue for the year \$836,115.17.

The disbursements charged to Revenue Account were \$812,668.92, of which \$435,813.63 was for interest, the balance being for administration, operation and maintenance.

The amount disbursed on Capital Account was \$1,454,926.93, of which the larger items were as follows:—

High Level Railway.....	\$406,409 95
Grain Elevator No. 2. ....	360,441 53
New Victoria Pier and Market Basin. ....	269,017 90
Improvements, Eastern Section.....	137,495 72
Floating Elevators, Plant Account. ....	100,000 00
Sundry Items. ....	181,561 83
	<hr/>
	\$1,454,926 93

The following loans on Capital Account were received from the Dominion Government:—

Under Act 61 Victoria, Chap. 47. ....	\$50,000 00
Under Act 1 Edward VII, Chap. 9. ....	10,000 00
Under Act 6-7 Edward VII, Chap. 30. ....	15,000 00
Under Act 9-10 Edward VII, Chap. 42. ....	1,225,000 00
	<hr/>
	\$1,300,000 00



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Harbour Debentures, series "A," amounting to \$100,000.00, bearing interest at five per cent., which matured on the 5th July, 1910, were retired by loan of an equal amount received from the Dominion Government under Act 9-10 Edward VII, Chap. 42, the interest on which is  $3\frac{1}{2}$  per annum.

The Debenture debt of the Corporation on the 31st December, 1910, was \$14,292,000.00, of which \$1,872,000.00 is to the Public and \$12,420,000.00 to the Dominion Government, upon which the average rate of interest is 3.21 per cent.

I have the honour to be,

Sir,

Your obedient servant,

DAVID SEATH,

*Secretary.*



HARBOUR COMMISSIONERS OF MONTREAL.  
SUMMARIZED STATEMENT OF OPERATIONS FOR THE YEAR 1910.

Receipts and Balance.		Revenue.	Capital.	Disbursements and Balance.		Revenue.	Capital.
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
<i>Receipts 1910</i>				Refund of Wharfage Outwards, . . . .		9 34	
Collector of Customs:				Buoys and Beacons, . . . .		140 39	
Wharfage dues on Imports, . . . .	\$258,996 20			Advertising Account, . . . .		423 65	
Wharfage dues on Exports . . . .	94,077 34			Annuity, . . . .		600 00	
Switching Cars, . . . .		\$353,073 54		Refund of Wharfages Inwards, . . . .		1,202 21	
Wharfinger, Local Traffic, . . . .		124,801 79		Temporary Shed, . . . .		1,305 08	
Elevating Grain, Floaters, . . . .		86,798 76		Harbour Surveys, . . . .		1,323 71	
Rental of Harbour Tracks and Properties, . . . .		41,287 95		Operating Electric Hoist and Transporters, . . . .		1,457 45	
Rental of Harbour Sheds, . . . .		34,057 29		Valuation of Properties and Plant, . . . .		3,152 10	
Grain Elevator No. 1, Elevating Charges, etc., . . . .		100,599 97		Premiums, Employers' Liability, . . . .		3,317 15	
Floating Crane, . . . .		92,428 55		Office Furniture, . . . .		5,864 24	
		3,067 32		Harbour Lighting, . . . .		8,457 60	
				Fire Protection Service, . . . .		10,203 17	
				Miscellaneous, Expenses, Printing, Stationery, Travelling, Legal and Notarial, etc., . . . .		11,008 57	
				Salaries, Commissioners and Staff, . . . .		46,798 10	
				Suspense Account, Materials <i>see Contra.</i> . . . .		55,296 34	
				Harbour repairs, Harbour Tracks, etc., . . . .		149,618 73	
				Interest, . . . .		294,641 94	
				Harbour Sheds: . . . .			
				Interest on Cost, . . . .	\$100,200 48		
				Insurance, maintenance, etc., . . . .	11,724 80		
						111,925 28	
				Grain Elevator No. 1: . . . .			
				Interest on Building and Conveyors, . . . .	\$47,056 02		
				Wages, Power, etc., . . . .	51,095 85		
						98,151 87	
				Floating Crane: . . . .			
				Interest on Cost, . . . .	\$3,915 19		
				Wages, etc., . . . .	3,856 81		
						7,772 00	
				Elevator Conveyor System, . . . .			\$,1305 71
				Vulcan Wharf, . . . .			1,727 65
				New Latrines, . . . .			3,007 58
				Windmill Point Wharf, . . . .			3,176 04
				Harbour Plant, . . . .			3,622 00
				Harbour of Montreal, . . . .			4,000 00
				Engine House, . . . .			7,712 45
				Harbour Railway, . . . .			7,875 90
				Electric Hoists, Sheds Nos. 11 and 12, . . . .			11,628 13
				Traffic Department, Plant Account, . . . .			13,450 00
				Grain Elevator No. 1, Marine Tower, . . . .			22,475 95
				Dominion Coal Co's wharf, . . . .			42,990 24
				Grain Elevator No. 2, Part 1, . . . .			52,158 42
				Dredging and Filling, . . . .			58,680 18



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Hoisting Elevators, Plant Account . . . . .	100,000 00
Improvements, Eastern Section . . . . .	137,195 72
New Victoria Pier and Market Basin . . . . .	269,017 90
Chain Elevator No. 2, Part 2 . . . . .	308,283 11
High Level Railway . . . . .	406,400 95
Disbursements on Capital Account . . . . .	1,451,926 93
Disbursements on Revenue Account . . . . .	812,668 92
Total Disbursements . . . . .	2,267,595 85
Security deposits refunded . . . . .	8,039 45
Debentures, Series 'A,' due 5th July, 1910, retired . . . . .	100,000 00
Loss, Payable at 31st December, 1910:—	
Interest accrued and Coupons out- standing . . . . .	\$221,003 25
Outstanding Accounts . . . . .	177,140 03
Loss, Outstanding 31st December, 1909 . . . . .	\$402,013 28
	270,678 50
Balance at 31st December, 1910:—	
Cash on hand . . . . .	\$2,361 33
Bank of Montreal . . . . .	
Coupon Account . . . . .	365 00
Current Acct. . . . .	121,440 07
Discount of Debentures, H. A. J. . . . .	121,136 40
Supply Accounts Receivable . . . . .	10,941 83
Value of materials in stock . . . . .	123,856 91
	131,328 47
	393,263 61
	\$2,637,534 13

DAVID SEATH,  
Secretary-Treasurer.

Verified,  
RIDDELL, STEAD, GRAHAM & HUTCHESON, C. A.,  
Auditors.



## REPORT OF THE SUPERINTENDENT OF RAILWAY TERMINALS FOR THE YEAR 1910.

DAVID SEATH, Esq.,  
Secretary, Building.

Dear Sir,—

I beg to submit, for the information of the commissioners, a report of the operations of the traffic department during 1910.

### WINTER OPERATIONS.

As in the past years the import freight from West St. John was handled at shed No. 7 for the Canadian Pacific Railway Company during the closed season.

In addition to this the transfer of cars between the Grand Trunk and Canadian Northern Quebec Railways, with the local business for handling on the wharf, kept one engine in constant day service during the winter. The river did not rise to its usual winter level and the traffic was not interrupted, as formerly, by the ice and water on the low level wharves; the winter's business in consequence was more than three times as considerable as in 1909.

### CAR HANDLING.

With the arrival of ten cars of export for the steamship "Iona"—the first arrival from sea—on April 26th, the season was opened for the railway traffic. The increase in car handling during 1910 as compared with the preceding year is due to the augmented winter business. During the navigation season the months of August and September only show an increase in car handling over last year, and taking in the navigation season proper the difference in car receipts is exceedingly small.

An increase of 1,500 cars is recorded in the number of cars loaded and discharged direct into ship and shed, and this in face of the abnormal decrease of 384,000 barrels of apples—representing about 2,000 cars. The shipments of apples from the port in the fall are the principal factors in the car handling, and a decrease, as recorded above, has considerable bearing on the revenue of this department.

The transfer of cars between the Grand Trunk and Canadian Northern Quebec Railways via the harbour terminals shows an increase of 30 per cent over last year.

### IMPROVEMENTS AFFECTING THE TRAFFIC DEPARTMENT.

The most important improvement affecting this department since its organization was the construction of high level railway tracks—that portion extending from section 19 to Molson's Creek (section 55) being sufficiently advanced this year to permit of handling the traffic. The transfer of cars to the Canadian Pacific Railway via this new embankment began on September 7th, and on November 9th the delivery of cars to the Canadian Northern Quebec Railway at section 46 was effected on the new tracks. The level crossings on the low level wharf were abolished and the seven gatemen at the ramps were dispensed with. The official inauguration of the new embankment took place on November 15th, when the commissioners and representatives of the shipping and commercial interests inspected the new work from section 19 to the dry dock site at section 55.

The construction of a building for accommodating the locomotives was begun in the fall at section 42, but the work was discontinued during the winter and will be resumed as soon as the weather will permit.



## SESSIONAL PAPER No. 23

## CARE OF LOCOMOTIVES AND PLANT.

Locomotives Nos. 1, 2 and 3 were thoroughly overhauled in the Canadian Pacific Railway Company's shops during the winter and on the opening of navigation, were in readiness for handling the traffic. To cope with the increased work train service necessitated by the construction of Elevator No. 2, high level tracks and other improvements, as well as the future increase in railway traffic, the commissioners purchased two new locomotives which were received on June 6th and 24th and were immediately put into active service, giving entire satisfaction.

The commissioners also purchased ten patent dump cars for the construction work, which, with the locomotives, were kept in proper repair by this department.

## GENERAL REMARKS.

The facilities for handling the railway traffic were considerably minimized by the construction of the high level tracks and the new elevator during the entire summer, the track space, limited at all times, being still more curtailed by the construction, and it is a matter of gratification to record that notwithstanding these disadvantages the railway business was taken care of with the dispatch and efficiency that might have been expected under normal conditions.

The scope of the Traffic Department has extended yearly since its inception, but with the improvements now under way, the additional business that is bound to be derived therefrom, will, without doubt, be of such proportions as to exceed by far even the most optimistic expectations of the future growth of the Traffic Department.

Yours truly,

J. VAUGHAN,

*Superintendent, Railway Terminals.*

## REPORT OF THE HARBOUR MASTER OF THE PORT OF MONTREAL, FOR THE YEAR 1910.

OFFICE OF THE HARBOUR MASTER,

MONTREAL, DECEMBER 31ST, 1910.

DAVID SEATH, ESQ.,

Secretary, Harbour Commissioners of Montreal.

Sir,—

I beg to submit, for the information of the harbour commissioners of Montreal, the following as my annual report for the year 1910.

Appended hereto will be found five comparative statements, showing respectively, for the past ten years:—

1. Table showing the number and tonnage of all vessels that arrived in port.
2. Table showing classification of transatlantic vessels that arrived in port.
3. Table showing classification of vessels from the lower St. Lawrence and Maritime Provinces that arrived in port.
4. Table showing the number and tonnage of sea-going vessels belonging to the different nationalities that arrived in port.
5. Table showing the opening and closing of navigation, the first arrival and last departure of vessels, and the greatest number in port at one time.



1-2 GEORGE V., A. 1911

It will be seen that 411 transatlantic vessels arrived in port during the past season, with a tonnage of 1,658,414 tons, an increase of 40 vessels and 221,451 tons from the previous year.

The arrivals from the lower St. Lawrence and Maritime ports were 336 vessels, with a tonnage of 574,808 tons, an increase of 37 vessels and 100,358 tons from the previous year.

Of inland vessels there arrived during the season 13,636 with a tonnage of 4,327,799 tons.

The combined transatlantic, lower St. Lawrence and inland tonnage, therefore, for the season, amounts to 6,561,021 tons, an increase of 1,503,114 tons from the previous year.

The whole respectfully submitted,  
JAMES McSHANE,  
*Harbour Master.*

PORT OF MONTREAL.

COMBINED STATEMENT, showing the number and Tonnage of all Vessels that arrived in Port during the past ten years.

Year	TRANSATLANTIC.		MARITIME PROVINCES.		INLAND.		GRAND TOTAL.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
1901	449	1,016,918	293	436,130	8,450	1,683,186	9,192	3,136,334
1902	436	1,072,538	322	468,734	9,395	1,885,150	10,153	3,426,522
1903	484	1,418,156	318	472,748	15,358	2,415,791	16,140	4,306,695
1904	417	1,270,640	379	586,057	10,063	2,354,975	10,859	4,211,672
1905	442	1,354,829	391	585,227	11,112	2,785,551	11,945	4,725,607
1906	439	1,380,835	381	592,388	12,557	3,095,174	13,377	5,068,395
1907	381	1,339,014	361	586,972	14,420	3,620,950	15,161	5,546,936
1908	364	1,315,688	375	642,916	12,434	3,589,124	13,173	5,548,028
1909	371	1,436,963	299	474,450	10,991	3,146,494	11,661	5,057,907
1910	411	1,658,414	336	574,808	13,636	4,327,799	14,383	6,561,021

JAMES McSHANE, *Harbour Master.*

PORT OF MONTREAL.

STATEMENT showing Classification of Transatlantic Vessels that arrived in Port during the past ten years.

Year.	STEAMSHIPS.		BARQUES.		SHIPS AND BRIGS		SCHOONERS.		GRAND TOTAL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1901. . . .	425	1,003,941	3	1,241			21	11,736	449	1,016,918
1902. . . .	418	1,063,220	9	4,427			9	2,891	436	1,072,558
1903. . . .	476	1,414,195	2	1,388	1	1,543	5	1,030	484	1,418,156
1904. . . .	408	1,267,088	3	1,144	1	318	5	2,090	417	1,270,640
1905. . . .	422	1,337,517	3	2,324			17	14,988	442	1,354,829
1906. . . .	420	1,372,879	3	1,872			16	6,084	439	1,380,833
1907. . . .	381	1,339,014							381	1,339,014
1908. . . .	364	1,315,688							364	1,315,688
1909. . . .	371	1,436,963							371	1,436,963
1910. . . .	410	1,656,794			1	1,620			411	1,658,414

JAMES McSHANE, *Harbour Master.*



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## PORT OF MONTREAL.

STATEMENT, showing Classification of Vessels that arrived in Port, for the last ten years, from the Lower St. Lawrence and Maritime Provinces.

Year.	STEAMSHIPS.		BARQUES.		SCHOONERS.		GRAND TOTAL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1901. .	282	434,140	1	999	10	991	293	436,130
1902. . .	311	466,671			11	1,063	322	468,734
1903. . .	303	468,100			15	4,648	318	472,748
1904. .	366	582,819			13	3,238	379	586,057
1905. .	364	580,485			26	4,116	391	585,127
1906. . .	367	588,980			14	3,408	381	592,388
1907. .	343	579,930			18	7,042	361	586,972
1908. . .	350	640,244			25	2,672	375	642,916
1909. .	273	470,936			26	3,514	299	474,450
1910. .	306	572,022			30	2,786	336	574,808

JAMES McSHANE, *Harbour Master.*

## PORT OF MONTREAL.

STATEMENT showing the Nationalities and Tonnage of Sea-going Vessels that arrived in Port during the season of 1910, that were navigated by 42,681 seamen.

NATIONALITY.	Number of Vessels.	Tonnage.
British. . . . .	518	1,691,218
Norwegian. . . . .	205	471,288
German. . . . .	14	49,935
Dutch. . . . .	4	13,037
Danish. . . . .	2	3,252
American. . . . .	4	5,992
Total. . . . .	747	2,234,722

Of the above 717 were of iron or steel with a tonnage of 2,231,936 tons, and 30 were built of wood with a tonnage of 2,786 tons.

JAMES McSHANE,  
*Harbour Master.*



PORT OF MONTREAL.

STATEMENT showing the dates of the Opening and Closing of Navigation, the first arrival and the last departure for Sea, also the greatest number of Vessels in Port at one time, during the Past Ten Years.

Years.	Opening of Navigation.	Closing of Navigation.	First Arrival from Sea.	Last Departure for Sea.	Greatest Number of Vessels in Port at one time.			
					Sea-going.		Inland.	
					No.	Date.	No.	Date.
1901.....	April. 21 .	Dec. 10....	April 25....	Nov. 25..	25	July 8..	167	June 28..
1902..	" 3....	" 4....	" 17....	Dec. 4..	29	Oct. 9..	109	July 23..
1903.....	" 2....	" 10....	" 26....	Nov. 28..	33	June 8..	225	June 26
1904..	" 25....	" 9....	May 4....	" 27..	23	Sept. 10	180	July 13 .
1905.....	" 19....	" 12 .	" 2 .	" 30..	27	Oct. 4.	175	June 19 .
1906.....	" 20....	" 2....	April 28....	Dec. 2..	26	May 28..	124	July 8..
1907 .....	" 23....	" 15....	May 2....	Hov. 29..	29	" 24..	103	" 8..
1908 .....	" 22....	" 10....	April 30....	" 26..	24	June 21..	104	June 30..
1909.....	" 16....	" 27....	" 23....	" 28..	22	Nov. 9..	107	Aug. 31..
1910.....	" 1....	" 7....	" 11....	Dec. 1.	25	May 18..	122	Sept. 18..

JAMES McSHANE, *Harbour Master.*



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## REPORT ON THE WORKS FOR THE IMPROVEMENT AND MAINTENANCE OF THE HARBOUR OF MONTREAL FOR THE YEAR 1910.

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F. W. COWIE, M. INST. C.E., *Chief Engineer*.

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MONTREAL, MARCH 1ST, 1911.

DAVID SEATH, ESQ.,  
Secretary, etc.

Dear Sir,—

I have the honour, by direction, to present the following annual report on the operations for the improvement and maintenance of Montreal harbour during the year ended 31st December, 1910.

## INTRODUCTION.

## EPOCHS IN THE HISTORY OF MONTREAL HARBOUR.

As the year 1909 was an off year as regards construction work in the harbour of Montreal, the year 1910 will be noted in the records as an epoch in the history of the improvements to the port.

Former epochs, each serving to mark a distinctive step in advance, may be referred to as follows:—

1825—The opening of the first Lachine Canal.

1830—The commencement of the first Public Harbour Improvements by the first Harbour Commissioners.

1860—The opening of the Victoria Bridge.

1890—Plan 6a adopted by the Harbour Commissioners.

1898—Plan 6a modified, commenced.

1902—Elevator No. 1 commenced, for the Harbour Commissioners.

1904—The fourteen steel permanent freight sheds, commenced.

1908—The scheme of Improvements projected in 1887, adopted in 1890, including fourteen steel wharf sheds, completed.

1909—The Harbour boundaries extended by the Government of Canada, to include both sides of the river, including the beach up to ordinary high water mark, from three-quarters of a mile above the Victoria Bridge, down to Bout de l'Isle, a distance of about seventeen miles.

1910—The scheme of Harbour extensions, approved by the Board of Consultative Engineers in 1909, and recommended by the Commissioners for adoption. Approved by the Government, and the expenditure being sanctioned by Parliament, the works commenced.

## COMMENCEMENT OF CONSTRUCTION WORK ON HARBOUR EXTENSIONS.

With the approval of the plans by the Government, and the authorization by Parliament of a loan of \$6,000,000 on account of the project of harbour extensions, to be expended at the rate of \$2,000,000 per annum, the commissioners gave orders in April, for an immediate commencement of the work.



The re-organization of the construction staff was immediately taken up and placed, as soon as possible, on a basis for the varied, and in many cases, difficult work.

The necessary changes and additions to the commissioners' staff were at once undertaken.

The items of the programme for the first year were taken up by the commissioners and when concurred in, plans, specifications and estimates were prepared for consideration and approval by Order in Council, before the works could be undertaken.

The orders were given and, without any ceremony, work commenced on 12th April, 1910.

The year was a most anxious one and the staff, under the close personal supervision of the commissioners, commenced the work, straightened out the difficulties, looked after traffic in the best possible manner, and came through the year with the satisfaction of having carried out the year's programme.

The success of the work was almost, in every instance, complete, and with one exception due to later improvements, under the estimates.

The varied and important matters which the Engineering Department have to take charge of, under the directions of the commissioners, merit some attention.

The commissioners have required that the engineering designs shall be of the latest, and a continuance of the past history of port improvements under the ablest engineers of America, when the harbour of Montreal has always been looked to for the last call in types of construction. Economy is imposed, but not cheap work; rather permanence, combined with symmetry, and a view to the future.

The staff organization requires a responsible officer, always ready when required or in an emergency, to take charge of the many questions in connection with the general maintenance of the harbour, its channels, navigation, and the varying physical conditions, also the wharves, sheds, railways, roads, lighting, terminal and freight handling facilities, reports, information and records. The operation of grain elevators, floating elevators and cranes; the keeping of the wharves in order and traffic going; the information, advice and consultation as to the best ways and means of carrying on St. Lawrence traffic are also matters of every day work. Besides this, as is sometimes overlooked, there is the actual planning and direction of the construction work which, in Montreal Harbour, is done almost altogether departmentally, and not by contract.

The physical conditions of the mighty St. Lawrence and the problem in connection with its care are responsibilities not easily passed over. Mr. John Kennedy, for many years the chief engineer of the harbour and still its veteran honoured authority, once remarked that it was easy to coax the St. Lawrence but not safe to try to force it. The harbour extensions must necessarily upset nature to some extent, and the difficulties to be encountered constructing works in the mighty river to withstand currents, ice, changes in temperature of some one hundred and fifty degrees, as well as floods, are such as to require in the staff, engineers having above all things fearlessness of responsibility.

The construction work is almost universally carried on departmentally. The steady growth of the harbour and the constant yearly effort to keep pace with the commerce, has resulted in the commissioners having a splendid plant for the peculiar constructions required. Dredging plant, tugs, derricks and a shop for repairs, are all kept up-to-date, and the organization for construction is capable of dredging and placing in the works some two to three million cubic yards of excavated material, of building half a mile of cribwork and concrete quay walls of a height from the foundation to the cope of 60 ft., of building 50,000 cubic yards of concrete, constructing railways, walls, sheds, culverts and, in fact, almost every phase of port construction.



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Weekly, monthly and annual reports are furnished to the commissioners, giving full explanation of all details and of costs, quantities and comparative figures.

## GENERAL SUMMARY.

As a general summary, the following may be given as the principles and economics of the scheme of extensions commenced in 1910.

- I.—To provide necessary accommodation.
- II.—To reduce transportation costs.
- III.—To foster trade by providing exceptional facilities.
- IV.—To undertake justifiable port expenditure and keep the port on a paying basis.
- V.—To construct works of a credit to the Harbour Commissioners of Montreal and to Canada.

## ORGANIZATION FOR THE WORK OF EXTENSIONS.

The construction programme for the first stage in the harbour extensions provided for three years' work. The staff and plant of the Harbour Commissioners were sufficient for the ordinary maintenance and construction work, but for the undertaking of works of the magnitude of a proposed expenditure of \$2,000,000 per annum, it was manifest that additions to the staff and more plant would be necessary.

Mr. A. D. Swan, Resident Engineer, undertook the direction of the work on the ground, with the enthusiasm expected, and the various assistant engineers, superintendents and foremen were detailed, as quickly as possible, into a working organization for undertaking the various subdivisions and jobs in connection with the works.

The saw mill, under the charge of Mr. W. R. Lunan, timber inspector, was required to its full capacity, for supplying the heavy demands of timber required for the various works.

Mr. J. M. Nelson, assistant engineer, had charge of the works of maintenance and the track work.

Mr. J. P. Garnon, wharf superintendent, in connection with the many items of repairs and maintenance, had charge of the important details in connection with the necessary supply of labour.

Mr. P. McMullin, general railway foreman, without any ceremony, "turned the first sod" in diverting the old tracks to give room for the new works of improvement.

The accounting for this undertaking, all carried out departmentally, was ably supervised by Mr. Geo. Smart, Secretary and Accountant for the Engineering branch.

Throughout the whole of the construction work Mr. J. Vaughan, Superintendent of Terminals, gave valuable assistance in connection with the important matters connected with railway construction and the handling of material, all of which had to be carried out without interfering with a heavy season's railway traffic.

Other assistant engineers, office staff, assistants, superintendents, foremen, timekeepers, together with the large number of skilled workers required, and the officers and men of the dredging fleet, all entered into the work with enthusiasm.

Every effort was made throughout the whole of the works of construction operations, by order of the commissioners, to take every effort and spare no expense for the safety and care of the public and to interrupt the traffic to the least possible extent.



Frequently, jobs had to be delayed or put off, much to the disadvantage of progress, in order to convenience traffic conditions. This would not have been possible under contract conditions and was to the advantage of the public.

## PART I.—CAPITAL.

### ITEM 2.—ELEVATOR NO. 2.

Elevator No. 1 was constructed and the records of its operation, and the advantages obtained in connection with its installation, were so marked that additional elevator capacity and facilities were among the first requirements in the consideration of harbour extensions.

The plan of harbour extensions proposed an elevator to be placed at section 19, opposite the Bonsecours market, in such position that by conveyors the grain could be shipped to any of the central berths in the harbour, both built and proposed.

As Elevator No. 1 was designed to be essentially a marine elevator, the second proposition had in view a house essentially adapted for grain arriving by rail, as well as by vessel.

The necessary facilities for taking care of the rail grain from the new Georgian Bay grain ports to Montreal, were therefore urgent.

The plans for harbour extensions as approved by the Consultative Board of Engineers in October, 1909, provided, in item 2, for "the construction of a grain elevator No. 2, and jetty at section 19, with conveyors reaching adjacent piers. Capacity not less than one million bushels.

The proposed new Elevator No. 2, to be situated in such a central and valuable site in the harbour, and requiring such an extensive railway car handling lay-out, and in view of the large grain business in immediate sight, was further considered by the commissioners, and it was decided that its capacity should be increased from "not less than one million bushels" to 1,750,000 bushels.

The commissioners instructed the John S. Metcalf Co., Limited, grain elevator engineers, of Montreal, to prepare designs in conjunction with their chief engineer, for an elevator with extensive facilities for receiving from both by rail and by vessel, and with a conveyor system to connect with the conveying system already designed and constructed by them.

The plans were approved by the commissioners on the 3rd June, 1910, who decided to construct the elevator themselves, under the supervision of John S. Metcalf, consulting engineer, and the firm instructed to construct departmentally, the elevator and equipment, as engineers for the commissioners.

Part I, consisting of the marine tower jetty, the new quay wall in front of the elevator, the removal of cribwork, the excavation of the elevator site, the railway tracks and plant, were undertaken directly by the commissioners' Engineering Department.

Part II Elevator, designs and construction were to be carried out by the John S. Metcalf Co., Limited, as engineers for the commissioners.

In part I the total expenditure for the year was \$52,158.42, which included a commencement of the dredging for the jetty, a complete front of sheet piling, 14 inches thick, in front of the wharf up to low water level, a portion of the removal of cribs, all of the excavation for the site, and a small expenditure for plant.

The excavation was done without interrupting traffic, the material being removed by railway and placed in the embankment. A new Browning Locomotive Crane Excavator with a drag scraper bucket did the main excavation work, with



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some assistance from a 5-ton crane with a Priestman grab. The work commenced May 25th and was completed by the end of August, 36,600 cu. yds. having been removed.

In connection with the putting in of the reinforced concrete footing slab, covering the whole area under which the wooden piles were driven, an interesting series of tests was made to ascertain the effect of the vibration caused by pile driving being carried on at short distances from the fresh concrete work being put in.

The tests were made in the pit, under varying conditions and with different methods, and compared with similar tests made where there was no vibration. It was remarkable that the effect of the vibration appeared to advantageously result in compacting the concrete as it was being poured in and placed in position, and giving a higher tensile and crushing strength.

## ITEM 2.—PART II. REPORT OF THE JOHN S. METCALF CO., LIMITED.

Montreal, March 13th, 1911.

MR. F. W. COWIE,  
Chief Engineer,  
Harbour Commissioners of Montreal.

Dear Sir,—

Enclosed please find report on construction work, Harbour Commissioners' Elevator No. 2, as requested.

Yours very truly,

(Signed) JOHN S. METCALF CO., LIMITED.

PROGRESS REPORT OF WORK UNDER SUPERVISION OF JOHN S. METCALF COMPANY,  
ON HARBOUR ELEVATOR NO. 2.

In June, 1910, a construction office was built in the upper floor of Shed No. 13, and time-keeper's office and shop for wood working machines were erected on Section 19. A derrick was erected for handling materials from cars at the southeast corner of the site, and some contractor's equipment was received.

In July a pump was installed to keep water in excavation at the elevation 85.00, the river at that time being above 96.00. Steam hammers were assembled in the excavation, and on July 23rd the first test pile was driven. Pile driving proper started July 27th.

During August, crushed stone and sand-storage bins were erected on the water side of the site, and on the south end of the site a tower for the handling of concrete was erected and the concrete mixer installed. Platform and runways were erected between storage and concrete mixer.

In September sufficient piles were driven to permit of the first section of concrete slab on the top of the piles to be put in. The first concrete was run on Sept. 5th. During that month a second concrete tower was erected on the east side of the building line about the middle of the site. On top of the storage bins was placed a locomotive crane for unloading materials from barges. Another derrick was erected at the north end of the site for unloading and handling materials. By the end of September about two-thirds of the piles were driven; bottom concrete slab was about one-half in; one-quarter of foundations up to elevation 109.00 were built, and a few of the forms at the south end of the site up to elevation 119.00, for the receiving of concrete, was erected.

On October 31st, pile driving was finished. A total of 7,781 piles were driven in all, 6,226 being regular piles, the balance being extra. The length of penetration of piles ranged from 10 ft. to 51 ft. At the end of October 80 per cent of the



foundation slab was in; 70 per cent of the foundations up to elevation 109.00, and about 55 per cent of the foundations up to 119.00. Concrete work was stopped on November 24th. The foundations up to elevation 119.75 (street level) were then in. Total amount of concrete 9,706 cubic yards.

During the winter months false work for carrying bin bottoms and girders was erected. Forms were also prepared for bin bottoms, girders for first storey columns and sliding forms for bins. Wood working machinery was moved up into first floor of Shed No. 19, where the forms for girders, bin bottoms and bins were all prepared.

During the past few months fourteen of the boot tanks were placed, and the balance (3) we expect to get in during the next few weeks.

There is now prepared form work for the receiving of 5,000 cu. yds. of concrete, and in a few weeks the bin forms will be finished, bringing the total up to 17,000 cubic yards.

As soon as the first columns, bin bottoms and bin girders are completed the building of the bins will commence. These bin walls will be built to a height of 91 feet.

The building of the cupola, which begins at the top of the bins, will follow and the whole structure will be completed before the end of this year. The building will be 218 ft. above track level.

During the construction of the building, installation of equipment will be started and will proceed as fast as the structure will permit, and in the spring of 1912 the elevator will be ready to receive grain.

During the building of the elevator, the marine tower will also be constructed, the foundations for which are to be built on a jetty in front of the elevator, and will be put in during the latter part of the summer.

Building of conveyors connecting up elevator with present system of conveyors will also be proceeded with.

(Signed) JOHN S. METCALF Co., LIMITED.

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### ITEM 3.—THE IMPROVEMENT AND EXTENSION OF THE HARBOUR RAILWAY TRACKS, FOR USE SUMMER AND WINTER.

Following the line of discussion with regard to improving the harbour terminals, the plans for harbour extensions included a proposal for raising the Harbour tracks along the wharves from Victoria Pier, to the eastern limit of the existing tracks, to a height above winter flood level.

The objects were:—

1. To make the tracks available for use summer and winter.
2. To eliminate the dangerous level crossings at the approaches to the wharves from the city.

The Board of Consultative Engineers approved of this work, and Item No. 3 of the recommendations reads as follows:—

“The improvement and extension of the harbour railway tracks from Victoria Pier to the Racine Wharf above winter water level, so as to be useful both summer and winter.”

The original plans provided for an embankment wide enough for four tracks from Victoria Pier to Beaudry St., for two tracks from Beaudry St. to Molson Creek, and for a single track from Molson's Creek to the Racine Wharf. The height to be at elevation 120.00 to 126.00, Harbour Datum, from Victoria Pier to Dezery St., and elevation 116.00 from Nicolet St. to Molson's Creek.



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The original plans included eight subways, at Victor St., Berri St., Beaudry St., Papineau Ave., the Jail, Longueuil Ferry, Denonville St. and Dezery St.

The original estimate called for 450,000 cubic yards of filling.

In order, however, to very greatly improve the track lay-out, for Elevator No. 2, and for enlargements found necessary before the first section was completed, improvements were added which increased the extent of the work to its very great benefit.

The enlargements involved about 200,000 cubic yards additional filling, one double and two large single subways, to eliminate contemplated level crossings at Pius IX Ave., and Nicolet St., and an additional subway at Richelieu St., as requested by the City. The ramps, probably the most important passenger and carting arteries in the city, viz.: Victor St., opposite Bonsecours Market, and Berri St., were enlarged and the grades reduced from 1 in 11 to 1 in 20 and constructed with concrete walls and passenger walks and pavements.

As paving with either granite blocks or scoria, on an incline, is not suitable for either the heavy teaming or for ordinary safe driving in freezing weather, and as macadam has been found very dusty and non-lasting, Tarvia roadways were tried.

This consists of a 10-inch rubble bottoming covered with four inches crushed granite thoroughly rolled, then a hot coating of tarvia covered with two inches of crushed granite followed by a second coating of hot tarvia, on which a layer of granite screenings is spread, then a final coating of tarvia blended with granite screenings and the whole thoroughly rolled.

This type of road has never been tried under such heavy traffic in Montreal climate, and the results will be watched with interest.

As the filling of the railway embankment advanced, a gang of men were put to work to make a temporary rubble retaining wall out of the stones found in the filling. As this embankment will not be protected by the prolonged high level wharves down the St. Mary's current for some years, this wall, not at first contemplated, will be a great protection.

Rock ballast was used in connection with the construction of the finished permanent way, and it being one of the first examples of this type of railway ballast in the vicinity of Montreal, its fine appearance caused very favourable comment.

The subways were constructed in a permanent and symmetrical design, the walls and abutments of mass concrete and the bridges to be of steel girders. In view of the ever-increasing traffic conditions, the subways were enlarged wherever possible.

By using every effort, the elevated track was put through from Victoria Pier to Molson's Creek before the winter set in; so that railway traffic could be carried on throughout the closed season without interruption by ice or floods. Immediate results were shown by heavy winter traffic which otherwise would have been impossible on the low level railways.

For details of the different construction jobs, see the report of Mr. A. D. Swan, Resident Engineer.

#### ITEM 4.—NEW VICTORIA PIER AND MARKET BASIN.

In the Scheme of Extensions, designed in 1909, every consideration was given to enlarging the steamship accommodation in the central part of the Harbour, to connect with the present shed system and the successful grain equipment already in operation and proposed, for this season.

At the same time it was recognized that river and passenger and market vessels should have a location convenient to the city transportation systems and the Bonsecours Market.



The improvement of the old Victoria Pier was proposed on the same lines as the old pier, except that the upper and outside quays should be high level for steamships, and the whole of the inner basin quays low level, fitted with slips and exclusively devoted to vessels of the river class.

This was approved by the Board of Consultative Engineers, and Item 4 of their recommendations is as follows:—

“The construction of a new Victoria Pier and Market Basin giving 2,700 lineal feet of high level quays for ocean steamers, with a depth of 35 ft. at low water, and 4,000 lineal feet of low level quays for river vessels.”

As most urgent, this was one of the first items of work commenced. It involves construction in the most congested part of the harbour, while passenger and general market and shipping business is being carried on.

The high level steamship portion will give berths for five ocean vessels, where permanent sheds, railway and grain shipping facilities will be available. The completion of it will involve the widening of the ship channel to 700 feet, the diversion of the Guard Pier to give the necessary room and protection, and compensation by enlarging the channel for the outlet of a portion of the flow of the river, south of St. Helen's Island.

The present three piers, which are too short, may then be lengthened according to the Plan of Extensions.

Of the high level portion good progress was made; 600 feet of quay wall was so far advanced that completion may be expected early in 1911, ready for the construction of the first shed.

A commencement was made on the work of diverting the Guard Pier, and a considerable amount of filling was done for the high level wharf. A new entrance was made through the flood wall to give more convenient access to this pier.

The Market Basin designed for river vessels will provide 4,000 ft. of quays, or 20 berths averaging 200 ft. each. This wharf is all to be constructed at low level, with slips in the concrete quay walls for the convenience of this class of vessels, most of which load and discharge by gangways.

As this basin will be thoroughly protected, it is expected that by building up columns from concrete piers, permanent sheds may be erected, where they may prove profitable.

The approaches from the city have been carefully designed. In view of the very extensive passenger and ferry services, at all hours of the day and evening, the safety of women and children was made a special feature. The approaches, therefore, to this Market Basin have been arranged so that there will be absolutely no level railway crossings. The ramps have been enlarged and good sidewalks provided, all passing by two subways under the harbour railways, so that the great dread, to passengers of excursion and ferry steamers, of crossing railway tracks, will be obviated.

Under instructions from the commissioners, slips for gangways have been put in at regular intervals, after consultation with the representatives of the river vessels. A concrete stairway has also been built as a landing for small boats.

Of the 4,000 ft. of quay wall in this basin, 1,000 ft. was constructed in 1910, complete with mooring posts, rings, ladders, etc., ready for use.

The total expenditure in 1910, out of the complete estimate of \$1,800,000 for the Victoria Pier and Market Basin, was \$269,017.90, including expenditure for plant.

ITEM 16.—THE IMPROVEMENTS BELOW ST. MARY'S CURRENT.  
EASTERN DIVISION. DRY DOCK SITE.

In the bay adjoining the outlet of Molson's Creek, or opposite the division line between Maisonneuve and Longue Pointe, an excellent natural site for a dry dock has been provided.



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The water in that locality is all shallow. In places the shoal dries at low water, and by preserving the bulkhead line of the eastern wharves, a made land area has been planned as a protection and site in connection with the proposed dry dock.

The company which made early application to the Government for the dry dock subsidy, propose to construct and operate a floating dock of large capacity.

For the Government, or a commission, owning and operating a dock, there are many arguments in favour of a graving dock, solidly built of masonry or concrete. The actual staff permanently required is not large as the docking is looked after by the ship or the contractor for repairs, and a graving dock once constructed successfully, requires a minimum of maintenance.

Where a shipbuilding company, however, owns and operates a dock, it is only necessary to draw from their permanent employees a crew to man and carry out the docking of a vessel, and a floating dock has the advantage of requiring less capital and one-half the time to build, and is at the same time more portable and capable of enlargement.

According to the plan adopted, the necessary dredging of the shoal and approaches will provide a very large quantity of excavated material, and as the company agreed to pay rental for a site for their works, it was decided to put all the excavated material in an embankment and make it a splendid site for the necessary yard and repair shops.

The design for the dry dock basin was therefore made, providing for protection works on three sides, and an ample approach from the ship channel.

The basin proper is to be 1,000 ft. long and 500 ft. wide. It will be surrounded by permanent quay walls. The slope of the outside protection works will be protected by riprap similar to the Guard Pier in the Central Division of the harbour.

This basin would therefore not only be suitable for the protection and operation of a floating dock, but would provide a splendid coaling or other dock.

About thirty per cent. of the channel approach was dredged in 1910, and a considerable portion of the basin excavated and the material in the banks already makes a reclaimed land area of about six acres.

According to the report of Mr. Swan, about 800,000 cubic yards were excavated in 1910, or about forty per cent. of the total estimated quantity, most of which was placed in the embankment by derricks.

A large sewer from the Town of Maisonneuve crosses harbour property, without permission of the harbour commissioners, and discharges into the site for the permanent harbour works. Notice was given, early in the season, to the town authorities, that this sewer would require to be diverted or prolonged through the work. Tenders were called for the work but the only steps taken were that the town asked for an injunction against the harbour commissioners blocking up the sewer, although the commissioners had offered sufficient delay and every facility for carrying on the work. The court decided in favour of the commissioners, but the case has been taken to Appeal.

Sites for the delivery and stacking of materials are already in course of preparation and everything is ready for an early start on the construction of shops, etc.

#### ITEM 14.—DREDGING GENERALLY.

The principal general item of work in connection with the harbour extensions is an item for dredging and filling in general.

Item 14, in the recommendations of the Board of Consultative Engineers, reads as follows:—

“Dredging and filling, in general, including dredging for wharf accommodation, for widening the channel opposite St. Helen's Island and Isle Ronde; altering the



lower end of the Guard Pier; widening and deepening the harbour inside the Guard Pier, and deepening the channel between St. Helen's Island and the south shore, to lessen the St. Mary's Current and obtain the necessary material for the construction of the piers and wharves.

The amount proposed to be appropriated for this item, from the proposed three years' expenditure, commencing 1910, is \$400,000.

The enlargement of the harbour in the vicinity of the Victoria Pier, and eastward, requires the diversion of the Guard Pier to give the necessary room.

The main channel between the wharves and St. Helen's Island and Isle Ronde, requires to be enlarged.

As compensation for any works restricting the present flow of the river, it is proposed to enlarge the channel between St. Helen's Island and the south shore.

Besides the necessary works of excavation, large quantities of filling material are required in connection with the extensions.

Item 14 is to cover all of these subdivisions of the work of dredging and filling, including the plant for their required execution.

The altering of the lower end of the Guard Pier, the widening and deepening of the channel, and the necessary plant, as commenced in 1910, resulted in the expenditure of account of the appropriation on \$400,000 as follows:—

Altering the lower end of the Mackay Pier. . . . .	\$10,842 04
Widening and deepening of the channel in the harbour. . . . .	27,411 16
Plant. . . . .	20,426 98
	<hr/>
	\$58,680 18

PLANT.

In the sub-division of the appropriation for the three years' programme, an amount of five per cent. of each item was set apart for the necessary plant, so that all plant, in the same way as for ordinary tools and materials, is charged directly to the works for which it is required.

The plant acquired in 1910, and charged directly to the different constructions, consists of the following:—

1. A 100-foot boom, Browning portable land derrick equipped with a 2½ drag scraper bucket and a clam shell.
2. A 40-foot boom, Browning locomotive crane, fitted with a 1-yard drag scraper bucket and a clam shell.
3. A 5-ton Appleby Locomotive crane with Priestman grab.
4. 10 second-hand standard railway dump cars.
5. 1 Smith concrete mixer.
6. 1 Ransome concrete mixer.
7. 2 iron dump carts.
8. The shallow draught tug No. 1, converted from an old floating elevator.
9. The twin-screw, powerful steel tug "John Young," built under contract by La Compagnie Pontbriand, Limitée, Sorel.
10. The powerful spoon dredge No. 5, the hull and boiler built under contract by Messrs. the Polson Iron Works, Limited, Toronto, and fitted with machinery at the harbour commissioners' work shops.
11. A Packard 18-H.P. automobile for engineers' supervision and the use of the paymaster.
12. Three new flat scows 100 ft. long by 30 ft. wide and 9 ft. depth of hold, very strongly designed, were partially built.



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The total expenditure on the New Plant Account for 1910, all charged to the works, amounted to \$112,890.69.

## GENERAL IMPROVEMENTS.

## (3) ELECTRIC HOIST, SHED NO. 12.

As a trial machine, in connection with the desire of the harbour commissioners to increase the facilities for handling freight in the harbour, Electric Hoist No. 1 at Shed No. 12 was constructed and put in operation on May 21st, 1910.

The freight hoist was erected for the purpose of carrying a waggon and team from the ground level to the upper floor of the shed.

Capacity 10,000 lbs.

Speed, 30 ft. per minute.

Elevator platform, 12 ft. wide by 30 ft. long.

A 37 H.P. 3-phase, 550 volt motor operates the elevator. This machine is the slip ring type induction motor having maximum torque and minimum current in starting positions, thus being well adapted for this kind of service. The controller is of the reversible type, while on the contact arm of the motor circuit a dash pot is connected allowing the machine to accelerate gradually and doing away with any sudden jars. A steel cable is connected to this controller and is located conveniently in the wellway. In addition to this, an automatic stop motion opens the controller and stops the car at the upper and lower landings independently of the operator.

The car is constructed of a steel frame body well braced, with a platform 12 ft. wide by 30 ft. long covered by a 2½ in. oak flooring. The car is suspended by steel cables in such a way as to maintain itself in a horizontal position if at times the load is not evenly distributed at all points. The drum shafts are driven by a bronze rim worm gear running in oil tight cast iron housings. The worm gear on one drum shaft is cut right hand and the other left hand. These worm gears are driven by a forked steel worm shaft, solid in one piece, and cut right and left hand. Centrally placed between these worm shafts is the motor coupled by an extended shaft. The advantage of having a right and left hand worm shaft is the thrust strains oppose and balance each other, while any slight unbalancing will be taken care of by the thrust steps.

Four steel guide posts, placed near the corners, guide the car platform in its movements up or down.

One of the most important parts of the machine is the brakes. These are two in number, one on either side of motor shaft. As they work on a wide rimmed coupling which forms a brake pulley on which operates a leatherlined friction brake, an effective braking device is obtained.

The sides of the platform are sheathed 6 ft. high and on either end a double folding iron gate of equal height is provided in order to prevent teams from injury, and as a still further precaution a chain locks the wheel of each waggon when on the car platform.

The estimated cost of the hoist, including foundation and bridge to Shed 11, was \$13,000.00. The work was completed at an expenditure of \$11,628.13.

## (4) MCGILL ST. QUICK ACTING FLOOD GATE.

The Flood Wall built in 1902 for the protection of the city from floods, contains fourteen openings which are closed in winter by fixed gates. Formerly, before permanent sheds or elevators existed, there was no call for access to the wharves in winter.



Recently, however, there has been sufficient traffic to require several of the gates to be opened between the periods of December floods and those due to the breaking up of the ice in the spring. During the flood periods, however, all access to the wharves has been cut off by closing the fixed gates for about three weeks in early winter and the same time in early spring.

The traffic in connection with harbour railways, the grain elevators and the steel sheds, has in the last two winters become so great that the closing of all access cannot longer be permitted.

The harbour commissioners, therefore, requested the city to provide means of access to harbour property through the wall built to protect the city from floods, and failing any action on the part of the city, the Commissioners had a quick-acting gate designed on the principle of a lock gate, and constructed one for the McGill St. railway opening, to be charged to the city.

This gate was commenced on Nov. 7th and completed Dec. 16th, in time for the early winter flood period. It was only necessary to keep the footing clear of ice, and close the gate every night and open it in the morning.

During the flood period, when all other openings were closed, the daily traffic through this one was 500 to 550 teams, besides a heavy traffic in railway cars.

The gate has not yet been subjected to a trial under flood conditions, but an inspection of it will be convincing of its utility.

#### ENGINE HOUSE.

The harbour commissioners' Traffic Department, under the charge of Mr. J. Vaughan, Superintendent of Terminals, operates five switching locomotives.

During the first winter of operation, a temporary engine house was erected on the high level wharves, but it had to be removed in the spring to make room for traffic, there being no location on the high level wharves for a permanent structure.

In 1910, as soon as the high level tracks were constructed, a suitable site was looked for. Access was required from the city by carts, coaling approaches were required, water service, power and an outfit for cleaning and temporary repairs, as specified by the superintendent.

The location finally chosen was opposite section 42 just below the Dominion Cotton Mills, where the necessary site was available. Plans were made for a reinforced concrete building giving capacity for six locomotives, coaling plant and water service.

The estimated cost of the building and equipment was \$20,000.

Before winter set in, the footings of the foundations had been put in and material delivered, when, owing to the exposed situation, work was given over until more favourable weather conditions would be met with. The expenditure, including materials, in 1910, was about \$8,000.

#### WINDMILL POINT FILLING.

The large area of low ground between the Mackay Pier, the Victoria Bridge and Windmill Point, is open for the dumping of excavations, ashes or other suitable filling. A large area has already been filled and it is being added to yearly. The quantity deposited in 1910 was about 72,000 cubic yards.

Three watchmen are maintained throughout the year, to see that suitable material only is dumped and that levels are maintained.

Expenditure in 1910, \$3,176.04.

#### THE VULAN WHARF, LONGUE POINTE.

The new concrete wharf built in 1909 was filled up where the new filling had settled, the cost being \$1,727.65.



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## FERRY WHARF, ST. HELEN'S ISLAND.

At the request of the city commissioners, alternative plans were made for a proposed wharf for the ferry, the wharf being on harbour property.

## HARBOUR RAILWAYS, SIDINGS AND MANGANESE TURNOUTS.

The usual improvements were made to the railway tracks owing to the expansion of business.

On the high level wharves where the roadways are placed, manganese slip diamonds and turn-outs are being installed to great advantage and safety. The expenditure under these headings being in 1910 \$7,785.90.

## THE DOMINION COAL WHARF, HOCHELAGA.

One of the most extensive of the harbour enterprises is the coal trade.

At the request of this company a new wharf has been under construction at sec. 36-37, opposite Hochelaga.

The length of the wharf to be built, of permanent low level, concrete quays, to the harbour commissioners' standard was 1,250 ft. The last section of 283 ft. was added in 1910.

During the year 480,000 tons of coal were unloaded at this wharf.

## ELEVATOR NO. 1, SECOND MARINE TOWER.

The second marine tower, as reported on in the last Annual Report as being under contract by Mr. J. A. Jamieson, of Montreal, was constructed during the year, and preliminary trials made. Several minor matters still remained unfinished at the end of the year.

With the erection of the second marine tower for elevator No. 1, an additional 75 H.P. 3-phase 550 volt motor was installed to drive the main shafting and elevating marine leg, while for the working of the grain shovels a new method was instituted. Heretofore, they have been operated by compressed air; in this particular case, however, powerful magnets draw in and release the clutches which control the movements of the shovels.

These electro-magnetic clutches are so arranged as to work in pairs, alternately reversing the drums working the shovels. This action is accomplished by the use of automatic time interlocking solenoids, which not only prevent the reversing motion from being applied too quickly, but lock it in that position until released by the switch, thus allowing only one drum in each pair to run in the same direction. These portable oil switches which apply the current to the solenoids and thence to the magnets, are carried by flexible conductors to the hatch of the unloading vessel. Supplying power to these magnets, a motor generator set is used, changing, alternating current to direct current, and is placed in the sub-station.

## ELEVATOR NO. 1, CONVEYOR EQUIPMENT.

The finishing touches of this equipment and final payments were made early in the year 1910, expenditure being \$1,305.71.

## NEW LATRINES.

Three new latrines were constructed on the three high level piers.

## EQUIPMENT.

Several minor items of equipment in the steel sheds and machine shops were installed for the repairs and care of the property.



SURVEY OF HARBOUR BOUNDARIES.

A detailed survey of the new harbour boundaries was ordered by the harbour commissioners, and was being carried out throughout the summer by licensed land surveyors.

ELGIN BASIN SEWER.

The nuisance caused by the discharge of this city sewer into the harbour was unabated in 1910. In the autumn dredging was commenced, at the city's expense, but was interrupted by the winter.

PART II.—WORKS OF OPERATION AND MAINTENANCE.

THE STEEL FREIGHT SHEDS.

A careful inspection of the fourteen steel sheds was maintained throughout the year and repairs made as soon as found necessary. Repainting of the steel work, to prevent deterioration by rust, is being done in section each winter.

The sheds first constructed, and put into use in 1905, required attention first, the others following in the order of construction.

GRAIN ELEVATOR NO. 1.

The following table gives the records of the operations of the grain elevator since the house has been in commission:—

Year.	Bushels elevated.
1904.....	565,355
1905.....	4,356,568
1906.....	944,321
1907.....	1,078,289
1908.....	8,661,350
1909.....	11,691,071
1910.....	14,906,569

It will be seen from the above table that the past year has been the best since the inception of the elevator, the quantity handled during the season being over 3,000,000 bushels in excess of the previous year.

The year also records the maximum quantity of grain in store at one time, viz.: 1,021,107 bushels, the normal capacity of the house being 1,000,000 bushels. During the first half of the season the elevator was practically full all the time and grain could only be received as room was made by shipping, otherwise the operation of the elevator during the year was carried on very satisfactorily and without any mishap worthy of note.

The following report of Mr. Jere Nehin, Superintendent, gives the details of operation for the year:

MONTREAL, DECEMBER 31ST, 1910.

F. W. COWIE, Esq.,  
Chief Engineer.

Dear Sir,—

I beg to submit for your information and that of the harbour commissioners, the following report of the harbour commissioners' Elevator No. 1 for the season of 1910.

The season just closed, I am pleased to say, shows a considerable increase of business over all preceding seasons, being 3,215,498 bushels more than last season, which was then the best since the elevator had been in operation.



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During the season of 1910, 162 lake steamers and 225 barges were unloaded, making a total of 387 vessels against 335 in 1909, an increase of 52 vessels.

A new Marine Leg has been under construction for the elevator as a supplementary in case of emergency or urgency for unloading, thereby insuring efficacious means of prompt service.

The Elevator and Conveyor systems have given entire satisfaction and have worked in perfect order throughout the season.

The winter repairs such as required in any elevator after an active season, consist of the usual overhauling of machinery, etc., and are only of an ordinary character, to keep the elevator in a perfect condition.

On Monday, May 30th, there was in store the largest amount of grain at any one time during the season of 1910, which was under:—

Wheat. . . . .	244,967 bushels.
Corn. . . . .	15,761 “
Oats. . . . .	677,681 “
Barley. . . . .	82,698 “
Total. . . . .	1,021,107 “

No serious delay or mishaps have occurred during the season to interfere with the working of the elevator.

You will find statement here attached of season's work.

The whole respectfully submitted.

Yours obediently,

(Signed) J. NEHIN,  
Superintendent.

# STATEMENT OF GRAIN RECEIVED AND DELIVERED AT HARBOUR COMMISSIONERS' ELEVATOR No. 1, DURING THE SEASON OF 1910.

## GRAIN RECEIVED.

Kind.	No. of bushels.	Total.
In store end of season 1909. . . . .		254,304
Wheat. . . . .	9,541,471	
Corn. . . . .	1,132,354	
Oats. . . . .	3,602,012	
Barley. . . . .	365,889	
Buckwheat. . . . .	10,539	
		14,652,265
		14,906,569

## GRAIN DELIVERED.

By Conveyor System to Vessels. . . . .	12,768,308	
“ Elevator to cars. . . . .	900,221	
“ Elevator to teams. . . . .	225,046	
“ Elevator in bags. . . . .	295,977	
“ Elevator through loading tower. . . . .	4,162	
		14,193,714
In store end of season 1910. . . . .		712,855
		14,906,569



## ELECTRIC LIGHTING AND POWER.

The extensive electric lighting system required for the wharves and the increasing consumption of power made desirable a more favourable contract than that entered into on May 1st, 1904, which had still five years to run.

One of the conditions of the old contract made possible cancellation by giving one year's notice. This was done in 1909, and negotiations were entered into and tenders invited for a new contract for the necessary lighting and power.

A new contract was finally negotiated by the harbour commissioners with the Montreal Light, Heat & Power Co. This was commenced on May 1st, 1910, and resulted very satisfactorily for the balance of the year.

Unlimited power was available at all times and hours, and the saving in cost over the old contract was very apparent.

The lighting of the harbour has been kept up to standard during the year, from Bickerdike Pier to the St. Lawrence Sugar Refinery. The maximum number of lamps in operation during the summer was 174. During winter several lamps were as usual kept burning on the high level piers, where winter business was being carried on.

The Montreal Light, Heat & Power Co., the contractors for the lighting, made a trial of "Magnetic Arc Lamps" on the part of the harbour circuit. Fifty such lamps were installed in the vicinity of the Jacques Cartier and Victoria Piers and proved to be steadier and to give a more intense light than the old lamps.

## WHARF REPAIRS AND MAINTENANCE.

The general maintenance, cleaning and repairs to the wharves and roadways, have been carried out in a very economical manner during 1910. Only absolutely necessary repair work was done in view of permanent work to be carried out in the near future.

The final shoving of the river ice occurred on the 26th March and from that date the water gradually fell, and on the 1st April the first ferry boats had arrived in the harbour.

Very little ice was left on the wharves in comparison with other years, and the only clearing done was for the steamers at Longueuil Ferry, sec. 33, and from the site of McLean Kennedy's shed, sec. 40.

The general cleaning up of the wharves commenced on 7th April, and was continued steadily during the season. The high level wharves were kept in perfect condition and the low level wharves were attended to in the best manner possible under the conditions of construction work proceeding alongside.

The repairing of the roadways was commenced on 15th April and continued throughout the season. This work was carried on with smaller gangs than formerly, although the roads needed much attention on account of the diversion of tracks for the construction of the new high level railway.

Repair work to the planking and timber work of the wharves was commenced at the end of April and carried out with a small gang throughout the season, only necessary repairs being done.

## WHARF ACCOMMODATION.

The extent of the wharves at the end of 1910 is as follows:—

For 30 feet draught and over.....	18,720 lin. ft. or	3.540 miles.
For 25 to 27½ feet draught. . . . .	15,840 " " "	3.000 "
Total deep draught. . . . .	34,560 " " "	6.540 "
For 20 feet and under. . . . .	3,137 " " "	0.594 "
Total wharfage at the end of 1910. . . . .	37,697 " " "	7.134 "



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## RAILWAY MAINTENANCE.

The railway tracks, operated by the harbour commissioners, were kept in good condition during the year.

The paving at several places, between sections 14 and 18, which had been shifted alongside the tracks by the heavy traffic and frost, was taken up and relaid in cement.

The tracks from section 19 downwards had to be diverted to allow of the construction of Elevator No. 2 and of the new High Level railway. These tracks were afterwards kept in good order throughout the season.

## EXTENT OF HARBOUR RAILWAY TRACKS.

The extent of the harbour commissioners' railway tracks at the end of 1910 was as follows:—

1. South East of Lachine Canal, connecting only with the Grand Trunk Railway System, and not operated by the harbour commissioners' traffic department:—

	Feet.	Total Feet.	Miles.	Total Miles.
Mackay Pier	10,400		1.970	
Bickerdike Pier.	10,685		2.024	
Windmill Point Wharf. .	9,142		1.731	
	— — —		— — —	
Total South East of Lachine Canal.		30,227		5.725

2. Harbour front from foot of Lachine Canal to Molson's Creek, connecting with Grand Trunk Railway, Canadian Pacific Railway and Canadian Northern Railway, and operated by the Harbour Commissioners' Traffic Department:—

	Feet.	Total Feet.	Miles.	Total Miles.
High Level Embankment, wharves and piers, sec, 12 to 19. . . . .	41,200		7.803	
Sections 19 to 55. . . . .	32,000		6.061	
Low Level wharves, Sections 19 to 55.	47,000		8.901	
	— — —		— — —	
Total operated by commissioners.		120,200		22.765

3. Industrial Railway Connections:—  
Southern Counties Railway:

	Feet.	Total Feet.	Miles.	Total Miles.
Windmill Point. . . . .	475		0.090	
Locomotive Wharf.	1,350		0.255	
Longue Pointe Village Wharf. . .	160		0.030	
	— — —		— — —	
		1,985		0.375

Grand total of railway tracks on Harbour .	152,412	28.865
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## FLOATING CRANE NO. 1.

The Floating Crane was in commission during the whole season of navigation. Its services were first called for by steamships on May 2nd, and during that month and the month of June there were several requests for service. In the middle of May the crane was sent to Sorel to make some heavy lifts for the Department of Marine and Fisheries.



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During the months of July and August, and again in October and November, the crane was kept very busily engaged in lifting goods from vessels to lighters and into cars on the high level wharves, and also from the wharves to steamships.

The crane was also used by the commissioners as required in connection with construction work and care of plant.

The total number of lifts by the crane from and to steamships during the season was 162 and the total weight 1,302 tons. Among the articles lifted there were several large boilers weighing up to thirty tons each.

In addition to work of lifting, the crane was called upon, at the beginning of July, to transfer damaged wheat from the S. S. "Prinz Oskar" into a barge alongside. This was done by means of the auxiliary grain elevator leg of the crane, to the extent of 30,000 bushels.

#### PLANT, ORGANIZATION AND UP-KEEP.

The operation and up-keep of the extensive plant for the construction work in Montreal Harbour requires exacting supervision.

Each machine or vessel is in charge of trained officers and crews.

The working supervision requires both mechanical attention and the placing and looking after by the engineering staff.

The dredging plant actually excavated 794,944 cubic yards of material of all grades, from sewage matter and compact black sand to trap rock, at a cost of \$119,466, or an average of 15c. per cu. yd.

The derricks had to place most of this in the works at a cost of \$48,751.20, or an average of 6½c. per yard.

The drilling and blasting boat effectively blasted 21,896 cu. yds., in situ, at a cost of \$11,512.46 or 52 6-10c. per cu. yd., working by day only.

The costs in these three items are the lowest averages on record, for eight years. These low rates cannot be expected to continue, as everything was favourable in 1910, both as to materials and location of work.

The three concrete mixers recorded an output of 22,500 cu. yds. of concrete placed in the works.

In the shipyard a dredge, a derrick and seventeen other vessels were hauled out and repaired or in some cases partially rebuilt.

The machine shop was a very busy place keeping the machinery subject to such heavy, night and day duty, in order. The expenditure being, for construction and repairs, materials and labour, \$39,000.

The whole of this expenditure was subdivided and charged to the various works executed during the year.

In the harbour yard, general repairs were made to the tools, small plant, latrines, shanties, etc. A considerable amount of work was also done for the harbour extension works.

The dredging plant was put in operation as early as practicable after the early opening of navigation.

Dredge No. 4 started work on April 8th and Dredge "John Kennedy" on the 20th.

Derrick No. 3 commenced on April 8th, No. 6 on the 11th, No. 1 on the 21st, No. 5 on the 26th, and derrick No. 4 was not put in commission before August 15th.

Dredge No. 4 stopped work for the season on Nov. 25th, and dredge "John Kennedy" worked until Dec. 3rd.

The drilling and blasting boat was on duty from May 9th to Oct. 21st.



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New spoon dredge No. 5 was got ready for trial before the close of navigation, and its working proved satisfactory in every respect.

## MATERIALS.

All bulk materials such as unsawn and shipyard timber, unbroken and broken stone, sand, cement, steel rails, etc., are purchased by public tender, the total of which for 1910 amounted to \$335,000.

Stone and sand are delivered either on the wharves or directly to the works.

Cement is closely tested and stored in sealed bins, and delivered to the works as required.

Timber is received by the timber inspector and delivered to the various works on requisition.

Except for British Columbia and shipyard dimension timber, the timber is purchased in the rough logs, rafted directly to the booms, and sawn as required in the Harbour Commissioners' saw mill.

Nearly 5,000,000 feet B.M. of timber were sawn during the year, as well as 12,600 railway ties.

In the stores at the machine shop and harbour yard, small stocks of daily requirements of general hardware and various materials are kept on hand, all of which are purchased as required by the purchasing agent.

## LABOUR.

The number of men employed varied from time to time, as conditions would permit.

The labour market in Montreal is very good and men of all grades as to skill in all trades are readily to be obtained, and under good foremen they give very satisfactory results.

In the non-permanent gangs there was a good deal of trouble after pay days, but the more permanent men gave excellent satisfaction.

On the dredges, tugs and at the machine shop, ship yard and saw mill, fairly steady forces are maintained.

Derrick runners, concrete mixer men, and crane men were sometimes difficult to obtain and keep, as a contractor's rule in Montreal is "when a good man is wanted in a hurry go to the harbour commissioners' at six o'clock."

The following table shows the maximum and average number of workmen employed directly by the harbour commissioners during the season of 1910:—

	Maxi- mum.	Aver- age.
Construction of wharves, elevator, etc. ....	1,165	810
Maintenance, cleaning, etc. ....	76	54
Harbour yard, carpenters, blacksmiths, etc. ....	12	10
Sawmill and timber boom, sawers and handymen. ....	30	26
Machine shop, machinists, blacksmiths, etc. ....	56	41
Shipyard, carpenters, labourers, etc. ....	75	51
Dredging fleet, crews of dredges, tugs, etc. ....	172	145
Grain elevator, foreman and operators. ....	37	28
Shed repairs and maintenance. ....	23	7
	1,646	1,172

The working day in general is ten hours, but the hours were lengthened to 11 and 11½ hours during the busy season, and part of the work of construction and the dredging was carried on by both day and night shifts.



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Victoria Day, Dominion Day and Labour Day were kept as holidays and the daily workmen allowed a half a day's pay for each.

#### FIRES AND FIRE SERVICE.

A small fire occurred on 27th April at Victoria Pier, destroying a load of hay. The tug "St. Peter" asked by the city fire brigade extinguished the fire before any damage could occur to Harbour property.

A trivial fire broke out on July 5th at the outside river end of Shed No. 5. The tug "St. Peter" was near at hand and promptly extinguished the fire. The fire was supposed to have been caused by loafers on the wharf.

On the night of Oct. 13th flames were noticed by the tug "St. Peter" on duty at the machine shop. The tug at once proceeded down the river and found that the Elder Dempster Line shed was on fire. The tug arrived shortly after the city fire brigade and assisted in controlling the fire.

Early in the morning of Dec. 2nd, a slight fire occurred from the ignition of dust on the lower floor of Tower "C" of the elevator conveyor system. The men who discovered the fire threw the smouldering dust from one of the windows and no damage was done to the conveyors. The origin of the fire could not be definitely ascertained.

In the beginning of December the Grand Trunk Railway coal dump took fire, but was kept under control by the company, no damage being done to Harbour property.

The tug "St. Peter" in addition to its regular service, has been available at all times for fire protection service, special night watch being kept and the men ready for emergencies day and night. During the night the tug is stationed at the machine shop, where fire alarms can be readily telephoned and immediate action taken. This arrangement has proved satisfactory and results in prompt fire service being given.

#### GENERAL NOTES.

##### ICE MOVEMENTS, NAVIGATION, ETC.

The taking of the ice in the beginning of 1910 commenced on January 4th, when ice began forming on the river, and by the 11th, the ice had filled up above Victoria Bridge as far as Nun's Island. Teams were crossing the ice to Boucherville on Jan. 11th, and the river road to Longueuil was commenced on the 12th.

The breaking up of the ice in the spring commenced with the first shove on March 7th and continued until the 29th when the river was well cleared of ice.

On the 30th the harbour commissioners' tugs commenced running inside the Mackay Pier and breaking up the ice.

The ferry boats from Boucherville arrived in the harbour on April 1st, and the ice breakers, "Lady Grey" and "Montcalm," arrived on the 3rd from Quebec.

The first sea-going steamer arrived in the harbour on the 11th April, the earliest for many years.

The last departure for sea was on Dec. 1st, and the last inland vessel left on the 7th, thus making a navigation season of about thirty-seven weeks' duration.

There were no accidents to steamships in the harbour during 1910, but on Oct. 12th, two barges loaded with sand were sunk by colliding with one another whilst being towed by two different tugs.

One of the barges was beached by its tug a little below Ile Ronde, outside of the channel, in 15 to 18 ft. of water,



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The other barge sank in about 30 ft. of water at the edge of the ship channel, about 800 ft. below gas buoy No. 195, in such a position as to be a menace to navigation.

Owing to the lateness of the season and the strong current at the place it was considered inadvisable to dredge up the wreck. It was, therefore, decided to defer the removal of the wreck until winter, when it is proposed to break it up by blasting, through the ice, and by dredging in the spring when navigation opens.

## DEPTH OF WATER.

The depth of water in the ship channel, during the season of 1910, was considerably below the average of the last eleven years, but at no time did it fall below the full channel depth of thirty feet.

The following table gives a comparison of the monthly averages of the depth of water on the old No. 1 Lachine Canal lock sill, with the corresponding depth in the Harbour and Ship Channel.

MONTH.	Lachine Canal, depth on old lock sill No. 1.	Montreal harbour, depth in the ship channel.	
	Average. 1899 to 1909.	Average. 1910.	Average. 1910.
May. . . . .	21 ft. 8 ins.	18 ft. 8 ins.	34 ft. 1 in.
June. . . . .	19 ft. 3 ins.	17 ft. 8 ins.	33 ft. 1 in.
July. . . . .	17 ft. 6 ins.	15 ft. 7 ins.	31 ft. 0 in.
August. . . . .	16 ft. 4½ ins.	15 ft. 0 ins.	30 ft. 5 in.
September. . . . .	15 ft. 7 ins.	14 ft. 7 ins.	30 ft. 0 in.
October. . . . .	15 ft. 6½ ins.	14 ft. 7 ins.	30 ft. 0 in.
November. . . . .	15 ft. 4½ ins.	14 ft. 7 ins.	30 ft. 0 in.

## ANNUAL INSPECTION OF THE RIVER ST. LAWRENCE SHIP CHANNEL.

The annual inspection of the River St. Lawrence Ship Channel by the Minister of Marine and Fisheries and his officials, was made from Oct. 6th to 8th, 1910.

By direction of the commissioners, and on invitation of the Hon. the Minister, your Chief Engineer accompanied the party making the trip.

Mr. Alexander Johnson, the Deputy Minister, and Mr. V. W. Forneret, Superintending Engineer of the St. Lawrence River Ship Channel, accompanied the Minister to explain to the invited guests the work in progress.

Representatives from the Montreal Shipping Federation, Board of Trade, Chambre de Commerce, the Railway Companies and pilots were also present.

At Quebec, the party was joined by the Mayor of Quebec and by representatives from the Quebec Board of Trade, Shipping Federation, Harbour Commission, and officers of the Department of Marine and Fisheries.

The weather on Thursday, the 6th, was very bad but an inspection was made of the splendidly equipped shipyard at Sorel and of the hydraulic dredge "J. Israel Tarte" in Lake St. Peter. Owing to fog the "Lady Grey" only reached Quebec after midnight.

On Friday and Saturday the weather was very fine and a general inspection of the Port of Quebec, the dredges below Quebec, and the dredges at Cap à la Roche was made.



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The most interesting feature in connection with the dredging operations in the Ship Channel is the trial of the Lobnitz chisel cutter at Cap Charles.

This machine consists of a 20-ton ram provided with a hardened point. The ram is lifted by a powerful winch and dropped like a pile hammer. Five to six blows will cut a hole in the shale rock three feet deep. The holes are spaced at 5 feet centres and the machine was making about one hundred and eighty holes per day, resulting in the breaking of about three hundred and fifty cubic yards per day of twenty hours. The harbour commissioners' drill boat and blasting outfit in much harder rock and at higher cost, would not equal this amount by a considerable margin.

Some years ago I investigated this system for Cap à la Roche and did not recommend it, considering that as long as elevator dredges could dredge in rock without blasting, crushing was not necessary.

In the harbour, on the other hand, where blasting is required, the Lobnitz chisel cutter would, in my opinion, be of much greater advantage than at Cap à la Roche.

At the dinner given on the 7th, the Hon. Minister made several important announcements, viz.:—

1. The adoption of an urgent programme for the construction of the 35-foot channel.
2. Consideration of the insurance rates.
3. Opposition to the Long Sault Dam proposition.

Report of Mr. A. D. Swan, Resident Engineer; Report of Mr. J. M. Nelson, Assistant Engineer; and tables of Quantities and Costs, prepared by Mr. Geo. Smart, Accountant, are hereto annexed.

I am, Sir,

Yours obediently,

FREDERICK W. COWIE,  
*Chief Engineer.*

## REPORTS OF THE RESIDENT ENGINEER AND ASSISTANT ENGINEER OF THE HARBOUR COMMISSIONERS OF MONTREAL FOR 1910.

(To accompany Chief Engineer's Report).

MONTREAL, JANUARY 20TH, 1911.

F. W. COWIE, Esq., B.A., Sc., M. Inst. C.E.,  
Chief Engineer,  
Harbour Commissioners of Montreal.

SIR,—

### MONTREAL HARBOUR EXTENSIONS.

I have the honour to present the following report showing the progress made during 1910 with the construction of new works, authorized under the "Scheme for Montreal Harbour Extensions, 1909."

The detailed working drawings for those sections of the scheme to be proceeded with first were prepared in the beginning of 1910 and actual construction was commenced on April 8th and continued until Dec. 3rd, 1910. The first work to be commenced was the dredging for the foundations of the new quay wall at the



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market basin, followed successively by clearing of site and diversion of old low level railway tracks along the harbour front to permit the formation of the new high level railway embankment; the lifting of the concrete paving and blocks for excavation on site of new Elevator No. 2; the extension of the wharf for the Dominion Coal Co., at Hochelaga; and the dredging of the new dry dock basin at Molsons' Creek, until, by the end of April, new construction work was in progress along the whole harbour front from Jacques Cartier Pier to Molsons' Creek, a distance of nearly four miles.

Owing to the urgent necessity of carrying out the construction as rapidly as possible, the works were carried on continuously during the night as well as by day from June to November. The following is a brief summary of the principal work executed:—

1. The excavation for new Elevator No. 2 has been completed and the building constructed to above flood level.

2. The high level railway and embankment has been constructed from Jacques Cartier Pier to Molson's Creek.

3. Twelve subways of spans from thirty to fifty feet, and having concrete abutments, have been constructed.

4. Two new approach ramps or roadways leading to the harbour with concrete retaining walls twenty feet high, have been constructed.

5. 283 ln. ft. of new quay wall has been constructed at the Dominion Coal Towers' Wharf.

6. 1,000 ln. ft. of new quay wall has been constructed at the market basin.

7. 600 ln. ft. of new quay wall has been constructed to low level at the Victoria Pier.

8. 810,000 cu. yds. have been dredged for the new dry dock basin and six acres of land reclaimed from the river.

## DESCRIPTION OF WORKS.

*Work No. 1.—Elevator No. 2.*

*Job 1.—Lifting Paving Blocks:—*The site of Elevator No. 2 which was formerly used as quay space, had been paved with granite blocks on a bottoming of concrete, and this had to be removed before excavation for the elevator could proceed. This was commenced on April 21st and practically completed by the end of May. The removal of the scoria block pavement on the elevator site was commenced on April 21st and completed by the end of May.

*Job 2.—Excavation:—*The excavation on site of Elevator No. 2 had to be carried down to a depth of 22 ft. below quay level and was commenced on 25th May. The work was done with the aid of a travelling steam crane, excavator working on the scraper bucket principle, ordered for the purpose, from the Browning Engineering Co., Ohio. The material was loaded into dump carts and hauled by an H. C. M. loco., and deposited on the site of the new high level railway embankment between Victor and Beaudry subways.

Old timber cribwork, iron rods and rubble filling were encountered over the greater portion of the site and had to be removed. The work was carried on continuously night and day, and by the middle of July the western half was fully excavated and ready for driving of the foundation piles, which was begun on the 26th July under the engineering superintendence of Messrs. John S. Metcalf Co., Limited. The excavation was entirely completed by the end of August.

*Job 3.—New Entrance Gateway in Flood Wall:—*A new entrance gateway through the flood wall from Commissioners' St. to the wharf has been constructed



at Section 19, having a concrete sill with iron anchor plates embedded for the flood gates, which latter were taken from the gateway at the head of the old Victor St. ramp and slightly altered to suit the new position.

*Job 5.—Piling Front of Quay Wall:* In order to strengthen the old quay wall and permit the deepening of the harbour along the front of new Elevator No. 2, heavy timber sheet piling has been driven for practically the whole length of this quay from low water level, down to the rock, a depth of about fifty feet.

*Job 7.—Filling:* In order to protect the foundations of the elevator building during this winter, a considerable quantity of good dry material was required for filling the space round about the building to quay level. This was got from the dredged material at Molsons' Creek and brought up by rail, during the last days of November and beginning of December.

#### *Work No. 2.—High Level Railway Tracks.*

*Job 1.—Clearing Site:* A considerable quantity of material stored on the site of the new high level railway embankment, had to be removed before the tipping for the embankment could proceed.

*Job 2.—Diverting Tracks:* The old harbour tracks which were laid along the harbour front on the low level, from the site of new Elevator No. 2 to Pius IX Ave., a total length of about  $9\frac{3}{4}$  miles of track, including all crossings, switches and connections with the C. P. Ry., had to be lifted and relaid outside the site of the high level railway embankment, and as the traffic had to be kept going day and night during the whole period, this could only be done in sections, but by making as many of the connections as possible on Sundays, the whole work was completed satisfactorily without delaying the handling of traffic. As it was found necessary to do away with what was known as the old "Phosphate Siding" at Section 31, a new siding was laid along the edge of the old wharf immediately below Beaudry subway for the purpose of loading construction material.

*Job 3.—Lifting Paving Blocks:* A quantity of paving blocks were lifted from Victoria Pier westwards to permit laying of the temporary tracks.

*Job 4.—Drains:* Over 1,000 ln. yds. of various sized tile, fire-clay and rubble drains have been laid along the railway embankment all along the line to drain surface water.

*Job 5.—Temporary Retaining Walls:* Temporary retaining walls from four to five feet in thickness and varying from four to eight feet high, consisting of rubble stone picked from the material forming the railway embankment, were constructed along the whole face of the embankment to protect same at time of flood, in addition to which several walls of a similar character have been built on the inner side of the embankment for the protection of buildings, etc.

*Job 6.—Embanking:* Arrangements having been made between the Harbour Commissioners and the C. P. Ry. Co., the whole of the material for the high level railway embankment from Beaudry St. subway to Pius IX Ave. subway was obtained from the site of the new C. P. Ry. Place Viger terminals, where extensive excavations were being carried out by the C. P. Ry. The material was loaded into cars and hauled by C. P. Ry. locos. to the site of the new embankment, where the cars were discharged by plough. This work was carried on in a most expeditious manner, working night and day, the average quantity deposited being about 2,500 yds. per hour. To enable this work to be carried on, temporary trestle bridges were erected over all subways along the route. As the whole traffic leading from the C. P. Ry. yards to the harbour had to be maintained, the construction of this embankment had to be arranged so as not to interfere with the through connections



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until new connections had been made, and this was mainly effected by leaving the old ramp near Longueuil Ferry Subway undisturbed until a new ramp leading from the Dominion Coal Towers Wharf to Longueuil Ferry Subway had been constructed and taken into use, as well as a new high level connection with the C. P. Ry., near the jail subway. The greater part of the embankment between Beaudry and Victor St. Subways was formed of material excavated from the site of Elevator No. 2, the remainder being deposited from excavations from city contractors. From Pius IX Ave. to Molsons' Creek the embankment was formed by trimming up the old foreshore, the additional material required being mainly got from the dredgings of the new dry dock basin. This part of the work, which was largely done by a Browning Scraper Bucket Excavator, was commenced on the 20th Sept., and by working night and day was completed on the 22nd Nov.

*Job 7.—Permanent Way:* New 85-lb. permanent way has been laid along the entire length of the high level railway from New Elevator No. 2 to Molsons' Creek. From Elevator No. 2 to Jail Ramp and from Desery St. to Pius IX Ave., double track has been laid, the remainder is single track meantime. In addition, two ramps leading from the high to the low level were laid, one between Beaudry and Berri St. subways, the other between Dominion Coal Wharf and Longueuil Ferry subway. About forty-seven per cent of this track has been ballasted with crushed limestone.

*Job 8.—Victor St. Subway:* A new subway of 50 feet span with approach ramp has been constructed to form an access from Commissioners St. to low level wharf around Market Basin, so that the whole cart and passenger traffic therefrom may reach the city without crossing any railway track whatever. The approach roadway having a gradient of 1 in 20 is 40 ft. wide with a heavy mass concrete retaining wall to keep up the railway embankment. The roadway has been macadamized and treated with Tarvia, a mixture of tar and other ingredients, to bind the road material together; drains, water channels, stone curbs and concrete footpaths have been laid. In connection with this, the old flood and retaining wall at the top of this ramp had to be extended by about 60 ft., and a new flood gateway constructed at the head of the ramp.

*Job 9.—Berri St. Subway and Ramp:* A new subway of 36 feet span and approach ramp or roadway 36 ft. wide has been constructed at Berri St. in a similar manner to that at Victor St. The approach roadway, which is on a gradient of 1 in 19, takes the place of the old ramp at this place which was 21 ft. wide on a gradient of 1 in 11; and is macadamized and finished with Tarvia, and has concrete pavement and curb, drains, water channels, etc.

*Job 10.—Beaudry St. Tunnel:* The Beaudry St. Tunnel or Subway, having a span of 30 ft., has been extended for a length of 65 ln. ft., so as to carry the new high level railway over the access to the tunnel.

*Job 10a.—Voltigeurs St. Subway:* The old Voltigeurs St. ramp is on a very steep gradient and there is only 9 ft. headroom under the old C. P. Ry. subway; it was intended, therefore, to close this subway altogether. Pending definite arrangements being made, however, as to this, with the city, a gap was left in the embankment and the new railway carried over same on a timber trestle bridge. It has been noted that no traffic whatsoever has passed through this subway during the whole season.

*Job 11.—Papineau Ave. Subway:* The subway at Papineau Ave. having a span of 39 ft. 6 ins., has been extended by 50 ft. to carry the railway tracks overhead. The abutment walls are formed of mass concrete and some difficulty was encountered in the construction of this work owing to an old city sewer, discharging into the harbour, being found to run underneath the line of one of the new abutment walls. On opening up this sewer it was found to be in a state of collapse, the



timber of which it had been constructed being entirely rotten. This old work was therefore ripped out and in its place a new circular sewer 3 ft. diameter was constructed of concrete and lined with granite paving blocks, the sewage being carried temporarily in timber chutes.

*Job 12.—Jail Ramp Subway:* A new subway was constructed at the Jail Ramp so as to give access to the wharf at this point. The old subway under the C. P. Ry. lines is only 20 ft. wide, but the new part constructed has been made 36 ft. wide, so that if it is found necessary to give better access to the wharf at this point hereafter it could be easily carried out.

*Job 13.—Longueuil Ferry Subway:* A new subway, having a span of 35 ft., has been constructed so as to give access to the wharf at Longueuil Ferry.

*Job 14.—Denonville Subway:* The whole of the coal traffic, which is very extensive, leading from the wharf at this point had formerly to pass by a level crossing over the main railway tracks leading to the harbour. This crossing has now been done away with and a new subway of 36 ft. span constructed at the bottom of the eastern Denonville Ramp.

*Job 15.—Richelieu St. Subway:* A new subway, having a span of 36 ft., similar to the others, has been constructed to give access to the wharf at the bottom of the old Richelieu Ramp. It was not originally intended to construct a subway at this point and the railway embankment was carried past same. Owing to the steep grade, however, at Marlborough St., it was decided later to make an access at Richelieu. This was done by driving piles through the new embankment, and erecting a temporary trestle bridge, thereafter excavating the material of the embankment, which was used for filling behind the wharf at the Dominion Coal Towers immediately adjoining.

*Job 16.—Desery St. Subway:* A new subway, having a span of 39 ft 5 ins., has been constructed in a manner similar to the others, at Desery St.

*Job 17.—Nicolet St. Subway:* A new subway, having a span of 36 ft., has been constructed in a manner similar to the others, at Nicolet St. An old city sewer which discharges into the harbour near this point and passes along the middle of the new subway was strengthened and renewed.

#### *Small Bridge at St. Lawrence Sugar Refinery.*

A temporary low level access for cart traffic had to be provided from Sutherland Pier to the St. Lawrence Sugar Refinery, and for this purpose a small bridge of 20 ft. span was constructed of timber cribwork.

*Job 18.—Pius IX Ave. Subway:* A new subway of two 28 ft. spans has been constructed so as to give access to the wharf at Pius IX Ave.

All the abutments of the permanent subways have been constructed of substantial mass concrete, and temporary timber bridges have been provided until the steel spans can be made and put in position for permanent high level railway traffic.

*Job 19.—Molson's Creek Culvert:* A new culvert of 18 ft. span was constructed to carry the water of Molson's Creek underneath the high level railway. As the foundations for this culvert were all below low water, a temporary dam was constructed in the river around the lower end of the culvert, and sheet piling driven for a depth of twenty feet right across the lower end, after which the water was pumped out and the excavation carried on in the dry. Considerable difficulty was experienced in getting the foundations; as the upstream side was found to consist of running sand which could only be got out in small pockets and the concrete foundations put in immediately. By working night and day continuously this was eventually overcome and the foundations kept free of water. The culvert



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was constructed entirely of concrete, reinforced with old permanent way rails. A new water course has been cut, leading from the old culvert on Notre Dame street, to the new culvert, and the stream diverted into same.

*Steel-work Contracts.*

Contracts were entered into in July and August, 1910, with the Dominion Bridge Co., for the delivery and erection of the steel girder work for the eleven subways, and considerable progress has now been made with their manufacture. Erection on the site is expected to commence early in January, 1911.

*Work No. 3.—New Victoria Pier.*

*Job 1.—Lifting Paving Blocks:* About 3,000 sq. yds. of paving blocks were lifted on the site of the new high level pier and stacked for future use.

*Job 2.—Excavation and Dredging:* The foundations for the quay wall of the new high level Victoria Pier were dredged to 37 ft. below low water for a length of 600 ft. This entailed a considerable amount of work as the greater part was on the site of the old Victoria Pier, the filling of which was mainly composed of sand which took a very flat slope.

*Job 3.—Cribwork:* The cribwork for this pier was constructed in lengths of 200 ft., and three cribs or 600 lin. ft. were constructed and sunk in position to a depth of 37 ft. at low water, the front pockets were filled with rock and the remainder filled with sand and other material.

*Job 4.—Concrete:* The concrete superstructure was completed for a length of about 400 ft., up to the level of the old Victoria Pier and for about 200 ft. at the outer end to a level of 7 ft. above low water; the tie rods for the first length of 500 ft. have all been placed and anchored to concrete blocks and every third rod was considerably lengthened and anchored into the solid formation of the old Victoria Pier.

*Job 5.—Filling:* Filling along the back of the quay wall for the whole length of 600 ft. has been carried up practically to a level of the old Victoria Pier, and at the extreme outer end, the embankment was carried right around the end of the crib to the front where for a length of about 100 ft. it has been continued to a height of 20 ft., with a view to prevent damage to this part of the wall which will be very much exposed during ice shoves in the spring. The material for this filling was got partly from the excavation at Elevator No. 2, partly from city contractors, partly from dredging the site of the Marine Tower Jetty, but mostly from dredging along the side of the Guard Pier.

*Job 9.—Shed Foundations:* Concrete abutments spaced 22 ft. apart have been constructed along the back of the concrete superstructure to form the foundations for the front of the harbour sheds to be constructed hereafter.

*Work No. 4.—Market Basin.*

*Job 1.—Excavation and Dredging:* The foundations for the new quay wall of the Market Basin were dredged to a depth of 32 ft. below low water for a length of 1,000 lin. ft. Owing to the old wharf being in close proximity and founded at a much higher level the greater part of it collapsed from time to time as the dredging proceeded; this, however, had been anticipated and the ground fenced in before hand.

*Job 2.—Cribwork:* The cribwork for this quay wall was constructed in lengths of 200 ft. and 5 cribs or 1,000 lin. ft. were constructed, sunk in position to a depth



of 32 ft. at low water, the front pockets filled with rock and the remainder filled with sand and other material. In addition to this a further 200 ft. of cribwork has been constructed for a height of 6 ft.

*Job 3.—Concrete:* The quay wall was constructed of concrete from cope to low water level and was entirely completed for a length of 1,000 ft., which included the construction of eight slipways, a flight of stairs for landing passengers from small boats, bollards, mooring rings, ladders, anchor tie rods and blocks, etc.

*Job 4.—Filling:* Practically the whole area of the new quay space at the back of the new quay wall has been filled to cope level; the greater part of this filling was provided by city contractors dumping surplus material.

*Work No. 5.—Wharf at Dominion Coal Towers at Hochelaga.*

*Job 1.—Excavation and Dredging:* This wharf has been founded at a depth of 32 ft. below low water and a further extension of 283 ft. was completed, making the total length of this wharf about 1,250 ft.

*Job 2.—Cribwork:* Two cribs, each 140 ft. long were constructed, sunk in position and filled.

*Job 3.—Concrete:* The superstructure of this wharf from cope to low water level is constructed of concrete and was completed, together with the necessary tie rods and anchor blocks for a further length of 283 ft., making a total length of wharf at this point, as measured along the cope 1,245 ft. 9 ins.

*Job 4.—Filling:* The filling along the back of the new quay wall for the additional wharf space has been nearly completed for the entire length and a considerable portion of same, with a new siding laid thereon, was handed over for use of the Coal Co., on Oct. 10th.

*Work No. 6.—Dry Dock Basin.*

*Job 1.—Excavating and Dredging:* Dredging on the site of the entrance channel leading to the basin of the Dry Dock was commenced on April 21st with the H. C. Dredge "John Kennedy." By arrangement with the Marine and Fisheries Department, No. 6 Government Elevator Dredge started on the 23rd April, and No. 1 Government Dredge on the 26th April, both working in the entrance channel. On the 29th April H. C. Dredge No. 4 also started on this work. The dredged material was towed to the area to be reclaimed from the river in dump scows from the Government dredges, and from the harbour commissioners' dredges on flat scows, from which it was lifted by derricks to form the embankment. On the 18th May, harbour commissioners' Dredge No. 4 was taken away for work at other places, and likewise the Government dredges were removed, No. 1 on the 14th and No. 6 on the 21st June. Harbour commissioners' Dredge No. 2 was started to work during the night as well as by day on the 5th May, and continued doing so right through the season. The new Government Dredge No. 10 arrived on the works on the 2nd August and started work on the site of the entrance channel and continued there until the 23rd Nov. No. 1 Government Elevator Dredge returned to work on Oct. 17th and remained until the 25th Nov. Harbour commissioners' Dredge No. 2 was removed for work in the upper harbour on the 19th Nov. A new land derrick having a 100 ft. boom and working on the drag scraper bucket principle was purchased from the Browning Engineering Co., Ohio, and delivered in June. This machine was erected on the bank of the old foreshore, near Molsons' Creek, and has been used for filling a low lying strip of land between the harbour commissioners' railway, near where it connects with the Canadian Northern and Notre Dame St. The material for this filling was got from the dredging of the basin and



## SESSIONAL PAPER No. 23

channel, which was dumped in the river opposite the machine, whence it was scraped up and swung around to the site of deposit. This machine worked well and good progress was made.

About twenty per cent of the area of the approach entrance channel has been dredged to 30 ft. below low water level, and about thirty per cent of the area to 20 ft. below low water. About 65 per cent of the area of the Basin has been dredged to 30 ft. below low water and about six acres embankment reclaimed. The total quantity dredged by the Government dredges was 302,325 cu. yds., and by the harbour commissioners' dredges, 507,842 cu. yds., together being about forty per cent of the estimated total quantity of dredging to be done.

*Work No. 7.—Alterations to the Guard Pier.*

*Job 1.—Dredging:* In order to obtain filling rapidly for the New Victoria Pier and at the same time widen the harbour at this point, about 80,000 yds. of material was dredged on the inner side of the Guard Pier between the machine shops and the pier head.

*Work No. 8.—Marine Tower Jetty.*

*Job 1.—Dredging:* About 15,000 yds. of material were dredged from the site of the new Marine Tower Jetty to be constructed in front of Elevator No. 2 and used for filling at the New Victoria Pier.

*Deepening of the Harbour.*

*Rock Drilling and Blasting:* A considerable quantity of rock was drilled, blasted and dredged in the upper harbour for the combined purpose of obtaining rock filling for the new wharf work and at the same time deepening the upper harbour. The part operated on was at Sections 12 S and 13 S, and the material consisted of hard shale and trap rock. The blasting was done from the drill-boat which commenced work on the 9th May and continued until the 31st Oct. The number of holes drilled and blasted was 1,063, the average depth of holes being about 17 ft. The total quantity of rock drilled and blasted to a depth of 38 ft. below low water was 21,896 cu. yds., measured "in situ." The quantity of dynamite used was 13,097 lb.

*Removal of City Sewage from Elgin Basin.*

At the beginning of December the Harbour plant worked for three days and three nights dredging sewage deposit at the mouth of Elgin Basin sewer at Section 15, at the expense of the City of Montreal.

The dredged material was towed outside the Guard Pier and dumped into the swift current.

*New Engine House.*

The construction of the New Engine House on the High Level Railway embankment at Section 42 was commenced on the 14th Nov., and the trenches for the greater part of the outside walls have been excavated, and the reinforced concrete footings, and a small part of the wall was constructed before frost set in.

*Number of Plans Prepared.*

The number of original plans prepared in the office during the year was 116, in addition to which several duplicates were made of a great many of the drawings.



The following is a list of the principal new works and repairs executed at the Machine Shop and Ship Yard during 1910:—

*Dredge John Kennedy.*

Winter.—Hull partially rebuilt, several repairs and renewals to machinery.

Summer.—Two new hoisting wire ropes put on 2½ in. A frame repaired, studs in compressor box renewed, one side of boom support wire rope renewed.

*Dredge No. 4.*

Winter.—Foundation block under backing drum renewed, covering board partially renewed. Usual overhaul of machinery.

Summer.—One new hoisting wire rope 2¾ in. put on, boom support wire pulled through socket, wire renewed, pivot casting at top of A frame broken and replaced.

*Dredge No. 5.*

A new hull and boiler were constructed by contract at the Polsons' Iron Works, Toronto, and delivered in Montreal Harbour on July 26th. The greater part of the machinery from old Dredge No. 1 had been salvaged, and having been thoroughly overhauled, repaired and such parts as were missing renewed, the whole was re-erected and fitted out, at the Commissioners' Machine Shop, on the new hull, complete, by December 1st and working trials were carried out on Dec. 3rd and 5th, when the whole dredge now known as No. 5, comprising hull, boiler, machinery, equipment and electric lighting complete, gave full satisfaction in every respect.

*Derrick No. 1*

Winter.—Beam under stern anchor bracket renewed, general overhaul of machinery.

*Derrick No. 3.*

Winter.—Deck partly renewed, a few new tubes put in boiler, trip drum repaired and usual overhaul of machinery.

Summer.—Stern spud broken and replaced, trip drumgear repaired and cap on A frame repaired.

*Derrick No. 4.*

Winter.—Derrick wintered on ways, extensive repairs made to hull and new round bow built. General overhaul of machinery.

*Derrick No. 5.*

Winter.—General overhaul of machinery.

Summer.—New coupling put on anchor drum shaft.

*Derrick No. 6.*

Winter.—General overhaul of machinery.

Summer.—Boiler repaired, hoisting wire rope renewed, coupling of anchor drum shaft renewed.

*Drill Boat.*

Winter.—Deck and hull partly caulked, boiler almost rebuilt, general overhaul of pumps and machinery.



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*Tug "Alphonse Racine."*

Winter.—Air pump, etc., overhauled.

*Tug "Robert MacKay."*

Winter.—Guard rail repaired, H.P. piston repaired, extensive repairs made to boiler.

Summer.—Propeller blades renewed and propeller repaired.

*Tug "Aberdeen."*

Winter.—Boiler caulked and machinery overhauled.

Summer.—Air pump repaired, tug hauled up on slipways, stern tube repaired and hull scraped and painted.

*Tug "St. Peter."*

Winter.—Hull and deck partly caulked, new rubber valves put in fire pump, boiler repaired, small repairs to boiler during summer.

*Tug "Courier."*

Minor repairs.

*Tug No. 1.*

The old floating grain Elevator No. 1 was converted into a shallow draught tug and commenced work at the Dry Dock Basin on August 18th.

*Machine Shop.*

New chuck face lathe bought and installed.

New power hack-saw bought and installed.

New thread-cutting machine bought and installed.

*Floating Crane.*

New mooring bitts were put on during winter.

*Grain Elevator No. 1.*

Shafting and bearings repaired and a number of new pulley blocks made, etc.

*Floating Concrete Machine.*

Machinery overhauled during winter and small repairs done during summer.

*Department of Marine and Fisheries.*

Several small repairs were made to M. & F. Dredge No. 10 and tugs of M. & F. Department.

*Traffic Department.*

A number of pins, bolts and links were made, as well as several repairs to locomotive.

*Saw Mill.*

Machinery kept in repair boiler from floating elevator installed and new smoke stack made and put on.



*Floating Grain Elevators.*

Were kept in repair.

*Land Cranes and Mixers.*

Were kept in repair during the season.

*Scows.*

Two dump scows were hauled out and repaired (nearly rebuilt).

Twelve flat scows were hauled up on ship ways and repaired.

*Hull of Str. "Prescott."*

The hull of the Str. "Prescott," which was burned last season, was hauled up on ship ways and cut up.

*New Gates for Flood Wall.*

Casting, machinery and bolts made, etc.

*General.*

Dredge buckets and derrick clams were kept in repair during the summer, engine of motor boat overhauled and repaired during winter. A number of heavy tie rods were made for new concrete wharves, as well as a considerable quantity of bolts for new cribs. Three new steel hopper skip boxes were made for concrete work.

*Sawmill and Timber Boom.*

The sawmill worked 194 days of 10 hours, and 72 days of 12 hours, cutting up timber for cribwork for the new wharves, work at the shipyard, ties for the high level railway, timber for the new Elevator No. 2 and general wharf and harbour repairs.

The saw log carriage was rebuilt, as it was in a very bad condition, and as for some time there has been difficulty in keeping up the necessary steam pressure, an additional boiler was installed, taken from the old Grain Elevator No. 10.

The following quantities of timber were sawn:—

4,537,300 ft. B. M., soft wood.

243,140 ft. B. M., hard wood.

12,600 railway ties.

772 cords of mill slabs were sold by contract during the season.

*Schedule of Measurement.*

A schedule of measurement of the work executed during 1910 is appended hereto.

Yours obediently,

A. D. SWAN,  
*Resident Engineer.*

HARBOUR COMMISSIONERS OF MONTREAL.

MONTREAL, JANUARY 25TH, 1911.

F. W. COWIE, Esq.,  
Chief Engineer.

Dear Sir,—

I beg to report as follows on the different works in Montreal Harbour, Shore and Wharf Branch, carried out by direction, under my charge, during the season of 1910.



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The most important subdivisions of the shore and wharf operations were as follows:—

## THE CONSTRUCTION OF RAILWAY TRACKS ON THE WHARVES.

The laying of railway tracks upon the piers and wharves, other than those laid in connection with new harbour extensions, was carried on at different times during the season.

All new rails used were of 80 and 85 lbs. to the yard, the former Am. Soc. C.E., and the latter C. P. R., sections. Some 72 lb. and 56 lb. relaying rails were used, where the lightness of traffic would permit.

Standard ties, viz.: 6 in. thick, 8 in. face and 8 ft. long were used, except at switches and diamonds where ties of either pitch pine or hardwood were used, from 7 to 10 in. thick, 8 to 10 in. face and varying in length from 8 to 16 feet, as the case required.

The new track laid in 1910 was as follows:—

A siding 600 ft. in length was laid connecting with the main line on the Laurier Pier and running along the down-stream side at its inshore end.

The portion of the siding along the edge is 300 ft. in length, at 10 ft. centre from the edge and parallel thereto.

The work was commenced on 20th April and completed on the 7th May.

A siding 1,250 ft. in length was laid from the main line in section 38, opposite Moreau St., to the wharf in sec. 40-41, where it runs parallel to and at 10 ft. centre from the edge for a length of 425 ft.

The siding is connected with the track alongside the edge of the wharf in sections 41 and 42 laid in former years. The work was commenced on 21st April and completed on 12th May.

A siding 250 ft. in length was put in at the upstream end of the Grand Trunk Elevator, on the Windmill Point Wharf. The work was commenced on Nov. 10th and completed on the 16th of the same month.

A siding 1,800 ft. in length was laid from the main line in sec. 44 to the shore wharf of the Tarte Pier. Second-hand rails and ties were used, the siding being for temporary use.

## NEW LATRINES.

Three new latrines, each with private and public accommodation, were placed, one at the outer end of each of the Jacques Cartier, King Edward and Alexandra Piers.

## WATER MAINS.

A 12-inch water main was laid from the Harbour boundary line at Nicolet St., across the wharf to the back of the high level shore wharf of the Tarte Pier. When connected with the city mains, this will furnish water to the Tarte Pier and vicinity, for fire protection and other purposes.

## WINDMILL POINT WHARF.

The filling in of the back of the wharf on the south side of the basin, to form a railway embankment, was being carried out all summer. The material received was from city excavations, etc., and was delivered free of cost. About 72,000 cu. yds. were delivered and put into the embankment during the year.



## MAINTENANCE AND REPAIRS—REVENUE.

*Summer Cleaning and Watering of Roadways and Wharves.*

The cleaning and watering of the roadways of the wharves and throughout the harbour was commenced on 7th April and was kept up all summer.

*Roadway Maintenance.*

As soon as possible in the spring, the repairing of the macadam roadways was begun and there was a good roadway throughout the harbour early in April. The roadways were maintained in as good order as possible all summer.

*Macadamizing Stone.*

The stone for macadamizing the roadways in 1910 was from stock remaining on hand from 1909, and a small quantity which was purchased.

The quantity used during the summer for maintenance was 3,004 tons, of 2,000 lbs.

*General Repairs to Wharves and Water Front.*

As soon as the water had fallen sufficiently in the spring, any necessary repairs to the planking and timber-work of the wharves were carried out.

No heavy repairs were made with one or two exceptions, and the top planking was maintained in safe and usable condition all summer.

*Maintenance of Harbour Railway Tracks.*

The railway tracks throughout the harbour operated, by the Traffic Department, were maintained in good condition all summer by a section foreman and gang.

Watchmen were stationed at the various crossings and no accidents occurred.

*Electric Lighting of the Harbour.*

The lighting was continued throughout the year by The Montreal Light, Heat & Power Co., under contract.

*Life Saving Equipment.*

As soon as possible in the spring, life buoys and their accompanying poles were put in place where required, and the guard fences and "Danger" signs put up.

The number of life buoys in use in 1910 was 115, a decrease of 15 from the number in use in 1909.

All the ladders in the face of the wharves were repaired and kept in good order.

*Fire Protection.*

The wiring of the fire alarm system and the boxes were overhauled early in spring and put in good order.

*Harbour Yard.*

The repairing of the wharf plant and tools of all kinds was done in the harbour yard, Papineau Avenue.

All the water carts, road scrapers, carts, shanties, latrines, hose-stations, etc., were painted in the Harbour Commissioners' standard colours, red and gray.

A considerable amount of work was done in the yard in connection with the New Harbour Extensions,



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## GENERAL NOTES.

*Latrines and Drinking Troughs.*

The latrines and drinking troughs of the low level wharves, which were stored for the winter of 1909-1910, were placed in position and repaired and painted early in the spring and maintained in use all summer.

*Miscellaneous.*

Some repairs were made to the paving of the high level wharves, were disturbed by frost, alongside the railway tracks.

Repairs were made to the concrete wharf front, at low level line, in sec. 24 and at the Dominion Coal berth, section 36-37.

The Boundary Line between the Harbour Commissioners' property and that of adjoining proprietors, was marked out with granite boundary posts from the C. P. R. elevators, sec. 22 to Molson's Creek.

Yours obediently,

J. M. NELSON,  
*Assistant Engineer.*

## SCHEDULE OF MEASUREMENT OF WORK EXECUTED 1910.

Item No.	Description.	Quantity.
Work No. 1	<b>ELEVATOR No. 2.</b>	
Job 1	Lifting Paving Blocks. . . . .	sq. yds. 5,040
Job 2	Excavation. . . . .	sq. yds. 36,600
Job 3	Opening in Flood Wall. . . . .	cu. yds. 30
	Forming sides for gateway in masonry. . . . .	cu. ft. 135
	Concrete sill of gate. . . . .	cu. yds. 14
Job 7	Piling Front of Quay Wall. . . . .	cu. ft. 25,000
Job 7	Filling round Elevator. . . . .	cu. yds. 3,000
Work No. 2	<b>HIGH LEVEL RAILWAY TRACKS.</b>	
Job 1	Clearing Site. . . . .	tons 1,100
Job 2	Diverting Tracks. . . . .	ln. yds. 17,233
Job 3	Lifting Paving Blocks. . . . .	sq. yds. 3,450
Job 4	Drains. . . . .	ln. yds. 1,000
Job 5	Temporary Retaining Walls. . . . .	cu. yds. 10,350
Job 6	Embanking:	
a	By C. P. Ry. . . . .	cu. yds. 350,720
b	From Excavation at Elevator 2. . . . .	cu. yds. 36,350
c	By City Contractors. . . . .	cu. yds. 36,720
d	Between Pius IX Ave. & Molson's Creek. . . . .	cu. yds. 67,000
	Temporary timber bridges on concrete abutments by H.C.M. . . . .	Number 2
	Temporary bridges for construction work by C. P. Ry. . . . .	Number 10
	Temporary bridges on concrete abutments for Harbour Traffic by C. P. Ry. . . . .	Number 11
Job 7	Permanent Way. . . . .	ln. yds. 10,666
Job 8	<b>VICTOR ST. SUBWAY</b>	
a	Excavation . . . . .	cu. yds. 3,841
b	Concrete. . . . .	cu. yds. 1,740
c	Ramp Wall Removed. . . . .	cu. yds. 285
e	Macadam and Paving:	
	Curb (Single Line). . . . .	ln. yds. 17
	Water Channel. . . . .	ln. yds. 1
	9" Bottoming Roadway. . . . .	sq. yds. 1,177



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Item No.	Description.	Quantity.
Work No. 2—Continued.		
	6" Metalling with Tarvia. . . . .	sq. yds. 1,050
	8" Bottoming footpath. . . . .	sq. yds. 232
	4" Concrete footpath. . . . .	sq. yds. 232
	1½" Granolithic footpath. . . . .	sq. yds. 232
Job f	6" drains. . . . .	ln. yds. 46
	12" drains. . . . .	ln. yds. 60
g	Pitched slope. . . . .	sq. yds. 72
	Timber cope 10" x 16". . . . .	ln. ft. 115
	Cesspools. . . . .	Number 3
	Cutting concrete. . . . .	cu. yds. ½
	Concrete Foundations. . . . .	cu. yds. 1
	Brickwork. . . . .	cu. yds. 3
Job 9	<b>BERRI ST. SUBWAY &amp; RAMP.</b>	
a	Excavation. . . . .	cu. yds. 1,550
b	Concrete. . . . .	cu. yds. 2,482
e	Macadam & Paving:	
	9" Bottoming. . . . .	sq. yds. 1,383
	3" Metalling. . . . .	sq. yds. 1,223
	Macadam with Tarvia. . . . .	sq. yds. 1,268
	6" Bottoming footpath. . . . .	sq. yds. 271
	1½" Blinding with cinders. . . . .	sq. yds. 271
	4" concrete. . . . .	sq. yds. 271
	1½" Granolithic. . . . .	sq. yds. 271
	Concrete curb. . . . .	ln. yds. 150
	Water channel. . . . .	ln. yds. 283
f	Removing old wall. . . . .	cu. yds. 415
	Drains 6'. . . . .	ln. yds. 28
	Drains 12'. . . . .	ln. yds. 75
	Cutting concrete. . . . .	cu. yds. 1
	Concrete foundation. . . . .	cu. yds. 1
	Brickwork. . . . .	cu. yds. 4
Job 10	<b>BEAUDRY ST. TUNNEL.</b>	
a	Excavation. . . . .	cu. yds. 489
b	Concrete. . . . .	cu. yds. 860
Job 11	<b>PAPINEAU AVE. SUBWAY.</b>	
a	Excavation (including extra for Papineau Sewer). . . . .	cu. yds. 412
b	Concrete. . . . .	cu. yds. 665
	Lining with Blocks. . . . .	sq. yds. 50
f	Earthenware invert. . . . .	ln. yds. 15
	Reinforcement of rails. . . . .	ln. ft. 90
Job 12	<b>JAIL RAMP SUBWAY.</b>	
a	Excavation. . . . .	cu. yds. 265
b	Concrete. . . . .	cu. yds. 616
Job 13	<b>LONGUEUIL FERRY SUBWAY.</b>	
a	Excavation. . . . .	cu. yds. 264
b	Concrete. . . . .	cu. yds. 639
Job 14	<b>DENONVILLE SUBWAY.</b>	
a	Excavation. . . . .	cu. yds. 292
b	Concrete. . . . .	cu. yds. 552
Job 15	<b>RICHELIEU ST. SUBWAY.</b>	
a	Excavation. . . . .	cu. yds. 1,500
b	Concrete. . . . .	cu. yds. 655
Job 16	<b>DESERY ST. SUBWAY.</b>	
a	Excavation. . . . .	cu. yds. 266
b	Concrete. . . . .	cu. yds. 600



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Item No. Work No. 2—Continued.	Description.	Quantity
Job 17	<b>NICOLET ST. SUBWAY.</b>	
a	Excavation. . . . .	cu. yds. 285
b	Concrete. . . . .	cu. yds. 577
Job 18	<b>PIUS IX AVE. SUBWAY.</b>	
a	Excavation. . . . .	cu. yds. 505
b	Concrete. . . . .	cu. yds. 925
Job 19	<b>MOLSON'S CREEK CULVERT.</b>	
a	Excavation. . . . .	cu. yds. 2,552
b	Piling. . . . .	cu. ft. 532
c	Making dam. . . . .	cu. yds. 1,255
d	Concrete. . . . .	cu. yds. 1,800
Work No. 3	<b>NEW VICTORIA PIER.</b>	
Job 1	Lifting Paving Blocks. . . . .	sq. yds. 2,900
Job 2	Excavation & Dredging:	
a	By Derricks. . . . .	cu. yds. 2,250
b	By Dredges. . . . .	cu. yds. 89,075
Job 3	Cribwork. . . . .	cu. ft. 832,500
Job 4	Concrete. . . . .	cu. yds. 34,40
Job 5	Filling from H. C. dredgings and excavations. . . . .	cu. yds. 138,675
Job 9	Concrete Shed Foundations. . . . .	cu. yds. 410
	Filling from Elevator No. 2. . . . .	cu. yds. 3,650
	Filling from City Contractors. . . . .	cu. yds. 9,500
Work No. 4	<b>MARKET BASIN.</b>	
a	By Derricks. . . . .	cu. yds. 2,850
b	By Dredges. . . . .	cu. yds. 10,900
Job 2	Cribwork. . . . .	cu. ft. 1,094,400
Job 3	Concrete (incl. anchor bars). . . . .	cu. yds. 4,600
Job 4	Filling:	
a	City Contractors. . . . .	cu. yds. 73,800
b	From H. C. dredgings and excavations. . . . .	cu. yds. 107,087
Job 5	Drains. . . . .	ln. yds. 18
Job 8	Paving slipways. . . . .	sq. yds. 96
Work No. 5	<b>DOMINION COAL TOWERS WHARF.</b>	
Job 1	Excavation and Dredging:	
a	By Dredges. . . . .	cu. yds. 1,415
b	By derricks. . . . .	cu. yds. 300
Job 2	Cribwork. . . . .	cu. ft. 366,600
Job 3	Concrete. . . . .	cu. yds. 1,630
Job 4	Filling. . . . .	cu. yds. 78,000
Work No. 6	<b>DRY DOCK BASIN.</b>	
Job 1	Excavation & Dredging:	
a	By Government Dredges. . . . .	cu. yds. 302,325
b	By H. C. Dredges. . . . .	cu. yds. 507,844
Job 3	Derricks Filling. . . . .	cu. yds. 431,133
	Dredging Allan Basin. . . . .	cu. yds. 400
	Dredging Sec. 13S. . . . .	cu. yds. 54,935
	<b>NEW ENGINE HOUSE.</b>	
	Excavation in Suction Well. . . . .	cu. yds. 5½
	Excavation for trench of drain and suction pipes. . . . .	cu. yds. 235
	Excavation for wall footings. . . . .	cu. yds. 645
	Steel pipe laid (6" dia.). . . . .	ln. ft. 220
	Tile drain laid (12" dia.). . . . .	ln. ft. 220
	Reinforced concrete in footings. . . . .	cu. yds. 103



HARBOUR DREDGING.—Statement showing the number of days worked by each dredge and the quantity dredged at each place in the Harbour of Montreal, in 1910.

Number of Dredge	Places at which Dredging was done	Time of Service.		Quantities Dredged.		Character of Material Dredged.
		Days.	Total	Cubic Yards	Total Yards	
Spoon Dredge <i>John Kennedy</i> (No. 2)	Sec. 12N Allan Basin ..	$\frac{1}{2}$		400		Trap Rock.
	Sec. 4 & 5 Windmill Point. ....	9		3,900		Loose Rock.
	Sec. 13S & 14S Shoal. ..	11		7,392		Blasted Rocks and Silt.
	Sec. 19 Victoria Pier. .	4		1,200		Sand and Gravel, some Loose Rock.
	Sec. 19 Marine Tower Jetty. ....	12		15,600		Sand, Gravel and Stones.
	Sec. 21 Market Basin.	11		2,175		Stones, Gravel and Sand.
	Sec. 37 Dominion Coal Towers. ....	3		750		Gravel, Stones and Silt.
	Sec. 57 Dry Dock Approach. ....	50 $\frac{1}{2}$		93,692		Gravel, Silt & Clay, some Hard Pan.
	Sec. 57 Dry Dock Basin	264		385,650		Gravel, Silt & Clay, some Hard Pan.
			371		510,759	
Spoon Dredge No. 4.	Sec. 13S & 14S Shoal.	68		47,545		Blasted Rock.
	Sec. 15 & 16S Mackay Pier Division. ....	58		108,140		Stones and Sand.
	Sec. 19 Victoria Pier. .	84		89,925		Sand, Gravel and Stones.
	Sec. 20 to 22 Market Basin. ....	46		9,460		Stones, Gravel and Sand.
	Sec. 37 Dominion Coal Wharf. ....	5		665		Gravel, Stones and Silt.
	Sec. 57 Dry Dock Approach. ....	16		28,500		Gravel, Silt & Clay, some Hard Pan.
			277		284,235	
	Grand Total. ....		648		794,994	



HARBOUR OF MONTREAL.—Statement showing the days worked and the quantity dredged at each place in the Harbour of Montreal in 1910. (The quantities are cubic yards, scow measurement, and the cost includes everything except derrick work.)

PLACES WHERE DREDGES WORKED.	VESSELS.	TIME OF SERVICE.		QUANTITY DREDGED.		COST PER CUBIC YARD.		CHARACTER OF MATERIAL DREDGED.
		Days.	Total.	Cubic Yards.	Total Yards.	Each Dredge.	Average.	
General Dredging:						Cents.	Cents.	
Allan Basin Sec. 12N	Dredge <i>John Kennedy</i>	3		400		23 52		Trap Rock.
Windmill Point Sec. 14 & 5	"	9		3,900		41 02		Loose Rock.
Shoal Sec. 13S & 14S.	"	11		7,392		28 37		Blasted Rock, some Silt.
" " "	No. 4.	68		17,545		25 21		Blasted Rock.
Division of MacKay Pier, Sec. 15S & 16S	"	58	146½	108,140	167,377	9 45	15 60	Stones and Sand.
Marine Tower Jetty Sec. 19.	" <i>John Kennedy</i>	12		15,600	15,600		14 66	Sand, Gravel and Stones.
Victoria Pier Sec. 19.	" <i>John Kennedy</i>	4		1,200		63 40		Sand, Gravel and Stones.
" " "	No. 4.	84		89,925		16 47		Sand, Gravel and Stones.
Market Basin Sec. 20.	" <i>John Kennedy</i>	11	88	2,175	91,125	96 47	17 08	Sand, Gravel and Stones.
" " "	No. 4.	46		9,460		85 72		Sand, Gravel and Stones.
Dominion Coal Whf. Sec. 37.	" <i>John Kennedy</i>	3	57	750	11,635	76 08		Silt, Gravel and Stones.
" " "	No. 4.	5		665		13 25	77 70	Silt, Gravel and Stones.
Dry Dock Approach Sec. 57.	" <i>John Kennedy</i>	56½		93,692		11 48		Gravel, Silt and Clay, some hard Pan.
" " "	No. 4.	16		28,500		9 89		Gravel, Silt and Clay, some hard Pan.
Dry Dock Basin Sec. 57.	" <i>John Kennedy</i>	264	72½	385,650	122,192		11 11	Gravel, Silt and Clay, some hard Pan.
" " "	"		264		385,650		13 02	Gravel, Silt and Clay, some hard Pan.
Grand Total.			648		794,994		15 02	

GEO. SMART, Accountant.



1-2 GEORGE V., A. 1911

HARBOUR DREDGING. -Cost of Harbour Dredging Fleet in 1910. (Including all charges for Tug, Scow and Derrick Service—Credits for Work done outside of regular service not included.)

Name of Dredge.	Days Service of Dredge.	COST OF DREDGES		COST OF TUGS.		COST OF SCOWS, &c		COST OF DREDGE INCLUDING SCOW AND TUG SERVICE.	
		Per day of Dredge	Total.	Per day of Dredge	Total.	Per day of Dredge	Total.	Per day	Total.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Dredge <i>John Kennedy</i>	371	\$73 59	\$27,364 29	\$57 31	\$21,264 43	\$59 30	\$22,000 37	\$190 20	\$70,629 09
Dredge No. 4.....	277	59 69	16,534 33	"	15,876 73	"	16,426 17	176 30	48,837 23
Totals and Averages	648	\$67 74	\$43,898 62	\$57 31	\$37,141 16	\$59 30	\$38,426 54	\$183 25	\$119,466 32
Floating Derricks employed in handling material dredged. .									48,751 29
Cost of Harbour Dredging Fleet Proper. . . . .									\$168,217 61
Drilling and Blasting Boat employed at Rock Blasting. .									11,512 46
Total cost including Drilling and Blasting Boat									\$179,730 07

GEO. SMART, *Accountant.*



HARBOUR DREDGING.—Statement showing cost of Harbour Commissioners' Dredging by different dredges, with their proportion of Scow and Tug Service for 1910.

Vessels.	Dredge Service	Tug Service.	Scow Service and sundries	Dredge with tug and scow service.		Time of service		Cost per Work-ing day of dredge.		Quantity dredged.		Average cost per cubic yard.		Additional cost for unloading by derrick.		Proportion of materials dredged.	
	Cost.	Proportion of cost.	Proportion of cost.	Cost.	Days.	Cost per Work-ing day of dredge.	Cubic Yards.	Cents.	Cents.	Earth.	Rock	Earth.	Rock	Earth.	Rock	Earth.	Rock
Dredge John Kennedy	\$ 27,364 29	21,264 43	\$ 22,000 37	\$ 70,629 09	371	\$ 190 20	510,759	13 82	6.141	98 50%	1 50%	13 82	6.141	98 50%	1 50%	98 50%	1 50%
Dredge No. 4.	16,534 33	15,876 73	16,426 17	48,837 23	277	176 30	281,235	17 18	6.141	100 00	0 00	17 18	6.141	100 00	0 00	100 00	0 00
Totals and averages.	43,898 62	37,141 16	38,426 54	119,466 32	648	183 25	794,994	15 02	6.141	99.05%	0 95%	15 02	6.141	99.05%	0 95%	99.05%	0 95%

GEO. SMART, Accountant.



HARBOUR DREDGING.—Statement showing particulars of Cost of Working the different Vessels employed in Harbour Dredging in 1910.

Vessels.	Repairs and Maintenance.	Fuel.	Wages of Crews.	Proportion of Salaries of Staff.	Cost.	Less Credits.	Net Cost.	Total Cost.	Days of Service.	Cost per day
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		\$ cts.
Dredge <i>John Kennedy</i> . . .	13,330 28	3,525 50	9,375 16	1,133 35	27,361 29		27,364 29		371	73 75
Dredge No. 4 . . . . .	5,535 76	2,686 50	7,642 47	669 60	16,534 33		16,534 33		277	59 69
Dipper Dredges—Total	18,866 04	6,212 00	17,017 63	1,802 95	43,898 62			43,898 62	648	67 59
Floating Derrick No. 1 . . . .	1,068 34	1,554 27	5,432 30	349 17	8,404 08		8,404 08		251	33 48
" " No. 3 . . . . .	1,860 06	1,788 75	5,790 92	408 01	9,847 74	845 80	9,001 94		315	28 57
" " No. 4 . . . . .	8,314 21	701 25	3,142 08	531 21	12,688 75	493 38	12,195 37		152	80 23
" " No. 5 . . . . .	1,313 77	1,192 50	5,301 93	338 25	8,146 45		8,146 45		245	33 25
" " No. 6 . . . . .	1,871 86	2,026 00	6,819 30	466 29	11,183 45	180 00	11,003 45		370	29 74
Floating Derricks—Total . .	14,428 24	7,262 77	26,486 53	2,092 93	50,270 47	1,519 18		48,751 29	1333	36 57
Tug <i>Alphonse Racine</i> . . . .	925 29	2,598 75	3,379 98	303 74	7,207 76		7,207 76		229	31 47
" <i>Robert Mackay</i> . . . . .	1,765 78	3,468 55	4,666 59	437 40	10,338 32		10,338 32		316	32 71
" <i>Aberdeen</i> . . . . .	1,976 33	3,302 75	4,648 92	437 86	10,365 86		10,365 86		309	33 55
" <i>St. Peter</i> . . . . .	1,583 73	2,342 75	3,996 01	348 93	8,271 42	4,500 00	3,771 42		97	38 88
" <i>Courier</i> . . . . .	345 17	428 00	1,442 33	98 24	2,313 74	1,156 87	1,156 87		101	11 45
" No. 1 . . . . .	1,322 60	663 75	2,140 92	173 66	4,300 93		4,300 93		172	25 00
Tugs—Total . . . . .	7,918 90	12,804 55	20,274 75	1,799 83	42,798 03	5,656 87		37,141 16	1224	30 34
Scows and Sundry Plant . .	38,413 89	15 00	1,338 50	532 65	40,300 04	1,873 50		38,426 54		
Drilling and Blasting Boat	4,449 88	1,320 00	5,426 38	316 20	11,512 46			11,512 46	150	76 75
Grand Total . . . . .	84,076 95	27,614 32	70,543 79	6,544 56	188,779 62	9,049 55		179,730 07		

GEO. SMART, Accountant.



## SESSIONAL PAPER No. 23

HARBOUR DREDGING.—Comparative Cost from 1876 to 1910, inclusive. The quantities are scow measurement, and the cost includes handling by floating derricks).

	Years.	Cubic Yards Dredged.	Total cost.	Cost per Cubic Yard	Kind of Dredge Employed.
			\$ cts.	\$ cts.	
Interest and depreciation are not included in cost as given here.	1876	156,082	55,462	35 $\frac{52}{100}$	
	1877	173,499	45,103	26	
	1878	211,731	48,748	23	
	1879	189,609	41,006	21 $\frac{17}{100}$	
	1880	186,430	46,914	25 $\frac{17}{100}$	
	1881	170,764	54,128	31 $\frac{7}{100}$	
	1882	187,339	53,598	28 $\frac{60}{100}$	Spoon dredges and stone-lifters.
		9,429	13,254	81 $\frac{40}{100}$	Elevator dredges.
		196,768	66,852	33 $\frac{98}{100}$	Totals and average.
	1883	36,358	17,956	49 $\frac{39}{100}$	Spoon dredges and stone-lifters.
		6,990	19,385	82 $\frac{77}{100}$	Elevator dredges—lifting rock and boulders and clearing up.
		43,348	37,341	86 $\frac{14}{100}$	Totals and average.
	1884	125,648	49,468	39 $\frac{37}{100}$	Spoon dredges and stone-lifters.
	1885	69,494	28,563	41 $\frac{19}{100}$	" " "
	1886	57,728	25,772	44	" " "
	1887	36,993	23,259	62	" " "
	1888	73,150	36,690	50 $\frac{16}{100}$	" " "
		2,077	1,333	64 $\frac{13}{100}$	Elevator dredges.
		75,227	38,023	50 $\frac{54}{100}$	Totals and average.
	1889	205,283	54,574	26 $\frac{58}{100}$	Spoon dredges and stone-lifter.
		9,420	2,996	31 $\frac{80}{100}$	Elevator dredge.
		214,703	57,570	26 $\frac{71}{100}$	Totals and average.
	1890	186,670	53,674	28 $\frac{60}{100}$	Spoon dredges and stone-lifter.
	1891	259,267	49,571	19 $\frac{13}{100}$	Spoon dredges.
		43,290	14,232	32 $\frac{87}{100}$	Elevator dredge.
		302,557	63,803	21 $\frac{3}{100}$	Totals and average.
	1892	361,947	93,595	25 $\frac{58}{100}$	Spoon dredges.
	1893	235,280	93,050	39 $\frac{58}{100}$	" "
	1894	312,430	98,858	31 $\frac{64}{100}$	" "
	1895	496,528	99,400	20 $\frac{3}{100}$	" "
	1896	401,938	103,317	25 $\frac{79}{100}$	" "
	1897	284,844	68,211	23 $\frac{15}{100}$	" "
	1898	456,458	61,012	13 $\frac{27}{100}$	" "
	1899	963,131	100,163	10 $\frac{17}{100}$	" "
	1900	1,323,871	163,541	12 $\frac{26}{100}$	" "
	1901	1,359,221	190,242	14	" "
	1902	1,179,726	217,986	18 $\frac{48}{100}$	" "
	1903	854,510	226,736	26 $\frac{12}{100}$	" "
	1904	810,723	247,914	30 $\frac{58}{100}$	" "
	1905	324,187	141,059	43 $\frac{52}{100}$	" "
	1906	246,525	113,749	45 $\frac{34}{100}$	" "
	1907	257,321	112,611	43 $\frac{17}{100}$	" "
	1908	186,873	106,115	51 $\frac{42}{100}$	" "
	1909	233,535	92,294	39 $\frac{54}{100}$	" "
	1910	794,994	168,218	21 $\frac{17}{100}$	" "

GEO. SMART, Accountant.



1-2 GEORGE V., A. 1911

STATEMENT showing Expenditure by the Engineering Department for the year ended 31st December, 1910.

## EXPENDITURE ON CAPITAL ACCOUNT.

*Harbour Extensions:*

## Grain Elevator No. 2:—

Marine Tower Jetty, Quay Wall, Removal of Cribs and Excavation of Site. . . . .	\$ 52,158 42.	
Elevator Construction, J. S. Metcalf Co. . . . .	308,283 11	
	<hr/>	\$360,441 53

## High Level Railway:—

Improvement and Extension of Tracks, Embanking, Subways and Bridges. . . . .	406,409 95
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## New Victoria Pier and Market Basin:—

Excavation, Dredging, Quay Walls, Filling and Grading. . . . .	269,017 90
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## Dredging and Filling in General:—

Diversion of Mackay Pier, Dredging, Drilling and blasting. . . . .	58,680 18
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## Dry Dock Basin:—

Dredging and Filling reclaimed area. . . . .	137,495 72
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Total for Harbour Extensions. . . . .	\$1,232,045 28
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*Harbour Improvements:—*

Windmill Point Wharf—Filling. . . . .	\$ 3,176 04
Vulcan Wharf, Longue Pointe—Filling. . . . .	1,727 65
Harbour Railway—Sidings. . . . .	7,785 90
Dominion Coal Wharf. . . . .	42,990 24
Elevator No. 1—Marine Tower. . . . .	22,475 95
Elevator Conveyor Equipment. . . . .	1,305 71
New Latrines. . . . .	3,007 58
Wiring Sheds. . . . .	477 01
Machine Shop Equipment. . . . .	3,622 00
Engine House. . . . .	7,712 45
McGill Street, Flood Gate. . . . .	2,405 90
Electric Hoist & Bridge. . . . .	11,628 13

Total Harbour Improvements. . . . .	108,314 56
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Total Expenditure on Capital Account forward. . . . .	\$1,340,359 84
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## SESSIONAL PAPER No. 23

Brought Forward. . . . . \$1,340,359 84

## EXPENDITURE ON MAINTENANCE ACCOUNT.

Harbour Repairs and Railway Maintenance. . . . .	\$52,779 95
Grain Elevator, operation and repairs. . . . .	49,633 29
Floating Crane, operation and repairs. . . . .	3,856 81
Steel Sheds, repairs and maintenance. . . . .	5,351 90
Harbour Lighting. . . . .	8,457 60
Fire Tug Service. . . . .	1,500 00
Floating Elevators, repairs, coal, etc. . . . .	2,926 28
Electric Hoist, operation and maintenance. . . . .	977 58
Electric Transporters, operation and maintenance. . . . .	479 87
Harbour Surveys, Soundings, etc. . . . .	1,523 71
Harbour Expense. . . . .	833 79
Buoys and Beacons. . . . .	140 39
"Steamer Prescott" breaking up hull. . . . .	818 84
Victoria Pier Footbridge. . . . .	994 83
Cotton Factory Intake. . . . .	336 75
Sunken Dredge No. 1. . . . .	231 37

Total Expenditure on Maintenance Account. . . . . 130,842 96

Grand Total Expenditure by Engineering Department,  
1910. . . . . \$1,471,202 80

GEO. SMART,  
*Accountant.*



LIST OF HARBOUR COMMISSIONERS' DREDGING PLANT, 1911.

DESCRIPTION OF VESSELS.	HULL.			When Built.	ENGINES.				(Capacity of Bucket.	Depth to which Dig. can work	REMARKS.	
	Length.	Breadth	Depth.		Kind of Engine.	No. of cylin- ders	Dia. of cylin- ders	Length of Stroke				Pres- sure of Steam.
DREDGES.												
Boom Spoon Dredge <i>John Kennedy</i>												
" " No. 4. . .	Ft. in. over all. 90 0	Ft. in. Beam. 36 0	Ft. in. over all. 10 3	1892	Horizontal non-condensing	2	16	18	7	40	Wooden hull.	
" " No. 5. . .	90 0	36 0	10 9	1900		2	16	18	7	40	Steel hull.	
	104 0	36 0	10 9	1910		2	16	18	7	40	" "	
DERRICKS.												
Clam Shell Derrick	76 0	27 6	8 0	1899	Horizontal	2	12	14			Wooden hull.	
" " No. 1. . .	76 0	27 6	8 0	1900		2	12	14			" "	
" " No. 3. . .	75 0	26 10	7 6	1892	non-condensing	2	12	14			" "	
" " No. 4. . .	75 0	26 10	7 6	1892		2	12	14			" "	
" " No. 5. . .	75 0	26 10	7 6	1892		2	12	14			" "	
" " No. 6. . .	75 0	26 10	7 6	1892		2	12	14			" "	
DRILLING AND BLASTING BOAT												
TUG BOATS												
Tug <i>St. Peter</i>	80 0	27 0	5 6	1895							Three 5 in. steam drills, rebuilt 1903.	
" <i>Courier</i>	74 8	16 1	8 6	1875	Vertical non-condensing	1	20	22			Wooden hull.	
" <i>Aberteen</i>	36 9	9 3	6 2	1900		1	10	12			Composite hull.	
	79 3	18 3	9 0	1895		1	16	24			Steel hull.	
" <i>Red Mackay</i>	81 9	17 6	10 0	1899	Vertical condensing	1	32	24			" "	
" <i>Alphonse Racine</i>	90 0	18 6	12 0	1905		1	16	24			" "	
" No 1. . .	90 0	26 0	6 0	1893	Horizontal non-condensing	1	32	20			{ Iron, Sheathed with Elm, formerly Floating Elevator No. 1.	
TESTING BOAT. . .	{ 73 3	14 0	3 1	{ 1897							{ Two wooden scows, braced 16 ft. apart.	
	73 3	14 0	3 1		Capacity.						All wood.	
SCOWS.												
1 Flat deck Scow, No. 17. . .	75 0	20 2	6 0	1876	67½ cubic yds.							
1 " " No. 18. . .	75 4	20 4	6 3	1876	67½ "						" "	
1 " " No. 19. . .	75 6	20 3	6 5	1878	67½ "						" "	
1 " " No. 20. . .	75 6	20 3	6 3	1878	67½ "						" "	
2 " " Nos. 21 and 22. . .	85 0	25 0	7 5	1891	150						" "	
2 " " Nos. 23 and 24. . .	85 0	25 0	6 9	1891	150						" "	
5 " " Nos. 25 to 29. . .	85 0	25 0	6 9	1892	150						" "	
5 " " Nos. 31 to 35. . .	85 0	25 0	6 9	1893	150						" "	
2 Dump Scows Nos. 36 and 37	106 0	26 10	9 6	1899	200						" "	
1 Dump Scow, No. 38.	106 0	26 10	9 6	1900	200						" "	
2 Flat Deck, Nos. 39 and 40. . .	85 0	25 0	6 9	1903	150						" "	
2 Flat Deck, Nos. 41 and 42	87 0	25 0	7 6	1904	150						" "	

NOTE.—Tug *Hon. John Young*, built at Sorel, not yet in Commission, 1910.

GEO. SMART, *Accountant*.



SESSIONAL PAPER No. 23

APPENDIX No. 2.

REPORT OF THE QUEBEC HARBOUR COMMISSIONERS FOR THE  
CALENDAR YEAR ENDED DECEMBER 31, 1910.

QUEBEC, APRIL 17th, 1911.

To the Honourable

L. P. BRODEUR, M.P., P.C.,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I beg to send you, under separate cover, by registered mail, the annual report of the Quebec Harbour Commissioners, together with the statements of Revenue, Expenditure, Assets and Liabilities.

I have the honour to be,  
Sir,  
Your most obedient servant,

RAOUL RENAULT,  
*Secretary-Treasurer.*

QUEBEC HARBOUR COMMISSIONERS' REPORT FOR THE YEAR 1910.  
UNDER THE QUEBEC HARBOUR COMMISSIONERS' ACT, 1899.

QUEBEC, JANUARY 3rd, 1911.

To the Honourable

L. P. BRODEUR, M.P., P.C.,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—In obedience to section 46 of 62-63 Victoria, Chapter 34 (The Quebec Harbour Commissioners' Act, 1899), I beg respectfully to submit the following report on the operations of the Quebec Harbour Commissioners for the year 1910.

CHIEF ENGINEER'S REPORT.

The annexed report from the Chief Engineer, Mr. St. Geo. Boswell, conveys information regarding all matters coming under his charge in connection with the Harbour Works in general, and the various additions, alterations and reparations made to them, and to the other properties of the Commissioners during the year.

WHARFINGER'S REPORT.

The annexed report from the Wharfinger, Mr. P. Flynn, gives the usual information regarding the number of vessels which have used the Louise Docks during the season of navigation, and as a shelter during the winter season, the goods landed or shipped, and also the railway traffic over this portion of the Commissioners' property during the year 1910.



## HARBOUR MASTER'S REPORT.

The annexed report from the Harbour Master, Mr. James C. Sullivan, contains the usual data of the closing and opening of navigation, the formation of ice, and routine work of his department.

## PREMISES LEASED.

The leases of the following tenants have been renewed for one year, subject to cancellation within three months' notice if any of those properties were required for Harbour Improvements: Canadian Pacific Railway, Coal Oil Shed site, on the Embankment; Canadian Import Company, coal yard on the northern part of the Embankment, and two hundred feet frontage in the Inner Basin; Quebec Coal Co., coal yard; Quebec & Lake St. John Railway Company, riparian rights; J. B. Renaud & Co., lower floor of grain elevator, subsequently let to James Richardson & Sons, Limited; R. F. Cream & Co., brick building on the Embankment, subsequently transferred to J. B. Renaud & Co.; Quebec Railway, Light, Heat and Power Co., wood lots on the Embankment; Joseph Gingras, East India Wharf; Geo. Tanguay, store No. 6; J. Emilio Lachance, coal yard; Madden & Son, coal yard; E. M. Lennon & Co., Stores Nos. 7 & 8; John S. Thom, Store No. 10; J. B. E. Letellier, coal bins on Atkinson's Wharf; N. B. Latraverse, inside face of Atkinson's Wharf.

## LEASE OF GRAIN ELEVATOR.

The Commissioners, with a view of accommodating the local trade, which was put to considerable disadvantage since the destruction, by fire, in October, 1909, of the Great Northern Elevator, have leased, at a nominal rental, for ten years, to Messrs. James Richardson & Sons, Limited, of Kingston, Ont., their grain elevator on the Embankment.

This elevator, which was erected in 1893 by the Canadian Pacific Railway Company, on a site granted by the commissioners, was sold to the Quebec Terminal Company in 1910, and purchased from the latter by the commissioners in 1907. It had never been in use since its construction.

Under the present circumstances, and notwithstanding the rental, which is nominal, the commissioners consider that they have made a good transaction, because of the conditions which the lessors have to fulfil, namely: They are to bring annually to this port at least 500,000 bushels of grain on which they will pay all the harbour rates as per actual tariff; all the repairs, even the landlord's repairs are to be made by them and they have to maintain the building and the machinery in perfect order.

The conditions of the lease were accepted by both parties on October 5th, and on November 15th, the repairs to the building comprising a new metal roof, and the overhauling of machinery, including a new boiler, were completed, and the elevator was operated on that day, for the first time since its construction in 1893.

Up to the close of navigation, that is within about fifteen days, 157,487 bushels of grain were elevated.

## BY-LAWS.

The following by-laws were passed during the year, approved by the Governor General-in-Council, and published in the "Canada Gazette" in conformity with section 27 of the Quebec Harbour Commissioners' Act, 1899.

*By-Law No. 107.*—All steamships and all sailing vessels in tow, passing up or down through the harbour on the north (Quebec) side of the river, while between the Mariner's Chapel and the entrance to the Louise Docks shall keep out at least one-half ( $\frac{1}{2}$ ) cable's length from the front of the wharves.

No Ocean Steamship in passing down through the Harbour of Quebec shall exceed half speed between Cape Rouge Point and the eastern boundary of Indian



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Cove, and in passing up between the eastern boundary of Indian Cove and the site of the Quebec Bridge.

*By-Law No. 109.*—The wintering tariff on vessels of every description, scows, pontoons, booms, rafts, etc., shall be at the rate of one half ( $\frac{1}{2}$ ) of a cent per square foot, the space occupied to be reckoned by the registered measurement when available, or by actual size.

The wintering season will commence on the first of December each year, and will end not later than the thirtieth of April. Vessels taking wintering berths in the Louise Docks, or other docks or wharves under the control of the commissioners, must have their positions assigned by the Harbour Master, and will occupy the same at their own risk and without responsibility on the part of the commissioners, and they must not be cut out after ice is taken in the basins without the consent in writing, of the Harbour Master.

All vesels taking wintering berths must have both anchors out, and must be prepared to leave their berths in the spring when the ice is broken up.

CONTRACTS.

The following contracts were awarded during the year:—

To Messrs. Madden & Son, for the construction of the balance of the roadway to the Eastern end of the Embankment, thus completing the main vehicular artery on the docks.

To J. H. Gignac, Limited, the re-construction of sheds Nos. 19 and 21, destroyed by fire in October, 1909.

To J. H. Gignac, Limited, an addition of ninety feet to the north end of the Shed No. 26.

To Messrs. Jinchereau & Lamonde, the erection of a police station and warehouse to replace the buildings destroyed by the fire of October, 1909.

To the Dominion Bridge Co., the erection of a Bascule Railway Bridge, Strauss patent, on the Cross Wall, alongside the actual draw-bridge, to afford direct railway connections between the Embankment and the National Transcontinental Railway, and the other railways which will reach Quebec by the Cape Rouge bridge, via the Transcontinental line to Quebec.

To Mr. W. J. B. Fraser, for the supply of pitch pine, oak and elm required for the construction of a large pontoon for the coasting trade.

EXPENDITURE ON CAPITAL ACCOUNT.

The expenditure on Capital Account during the year has been of \$127,733.96, as compared with \$110,392.40 the year previous.

Particulars of this expenditure will be found in a statement accompanying this report.

The Dominion Government has advanced, during 1910, \$40,000.00 in connection with the work of deepening and strengthening the dock walls.

REVENUE AND EXPENDITURE.

The revenue of the Commissioners for the year 1910 has been \$121,036.84, or an increase over the preceding year of \$18,871.00.

The expenditure on revenue account has been heavy during the year, owing to the reconstruction of the inside face of the breakwater, and to repairs necessitated by the fire of October, 1909. The commissioners were also put to considerable expense through the alterations made in the examining warehouse, where temporary quarters have been prepared for the Custom House.



## NEW SHEDS.

The landing sheds, on Pointe-à-Carcy Wharf, destroyed by the fire of October 16th, 1909, have been rebuilt. Shed No. 19 was constructed on the same lines as the one which was burnt, but shed No. 21 was extended at its northern end, over the space formerly occupied by the cold store.

Shed No. 20 was considerably extended, and an addition of ninety feet was put to Shed No. 26 on the Breakwater Extension.

A new building was erected at the entrance of the Docks, part of which is to be used as quarters for the police, and part as a warehouse for supplies.

## ROADWAYS.

The roadway on the Embankment was completed.

The commissioners have now a first-class thoroughfare from one end of the embankment to the other and from the Dalhousie Street over the cross wall, joining the embankment roadway.

## PONTOON BERTH.

The commissioners, at the request of the parties interested in the coasting trade, and considering the considerable increase of traffic in that trade every year, and the lack of accommodation to properly handle it, have decided to procure a pontoon berth to meet the special requirements of the vessels engaged in this trade.

The Custom House pond has been chosen for this pontoon berth, as offering the best conveniences and a good shelter.

The commissioners expect that this berth will be in readiness shortly after the opening of the next season of navigation.

## CAR FERRY.

The car ferry service, inaugurated last season by the Quebec & Levis Ferry Company, Limited, has rendered great service to the local and through trade for the interchange of car loads between the different railways on both sides of the river; and the commissioners are pleased to mention that it had the effect of diverting some shipments from the Quebec Central Railway, which heretofore, had to be shipped via Montreal. These shipments, although not yet very considerable, are bound to increase from year to year, and to yield a good revenue.

## INTERVIEWS.

The commissioners have had the honour of having several interviews, during the year, with the Right Honourable Sir Wilfrid Laurier, the Honourable the Ministers of Public Works, Marine and Fisheries, and the Postmaster General, namely, on February 8th, May 17th, and September 20th, when they placed before them the needs of the port, particulars of which will be found in other paragraphs.

On July 14th, an interview was given to the representatives of the Quebec Wholesale Grocers' Association. They complained of the discriminating charge of two shillings and six pence, imposed on goods consigned to Quebec, as compared with goods of the same class consigned to Montreal. They informed the commissioners that the Canadian Pacific Railway Company was prepared to cancel this charge on goods shipped via their Empress boats, provided the commissioners granted them a reduction in the price paid for harbour dues. After an interview with the representatives of the C. P. R., the following resolution was unanimously adopted by the Board.



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RESOLVED: "The Quebec Harbour Commissioners, in view of the *Empresses* continuing to make Quebec their terminus, and without disturbing the existing conditions, agree to reduce the present rental paid by the Canadian Pacific Railway Company, from \$500.00 to \$333.00 for each Empress Steamship, without limitation of accommodation, or reduction of privileges of any kind whatsoever, or substituting for this reduction wharfage on either eastbound or westbound cargo, the Canadian Pacific Railway agreeing, within thirty days of the acceptance of this proposition, to apply the Montreal tariff to Quebec freight on all shipments offered via the *Empresses*."

Effectively, the Canadian Pacific has removed the discriminating charge within thirty days from the acceptance of this agreement.

GRAVING DOCK.

The question of the construction of a modern dry-dock has been another recommendation repeatedly made by the commissioners, and the following letter was forwarded to the Honourable the Minister of Public Works on July 23rd:—

To the Honourable

WM. PUGSLEY, M.P., P.C.,  
Minister of Public Works,  
Ottawa.

SIR,—I have been directed by the commissioners to again respectfully call your attention to the urgent need of a modern dry-dock at Quebec.

There are now about twenty steamers trading to the St. Lawrence too large to be admitted in the Levis Graving Dock, and should an accident happen to any of these large vessels, they may become total wrecks for the lack of suitable docking accommodation on the St. Lawrence.

The increasing trade of the St. Lawrence, and the tendency of modern ship-building to constantly increase the size and draught of vessels for the St. Lawrence route, so as to enable them to advantageously compete with the American ports, make it imperative that a graving dock of a greater capacity be provided.

The Canadian Pacific, the Allans, the White Star Dominion, the Canadian Northern, and other Steamship Companies are, I understand, contemplating the building of larger steamers than any now on the St. Lawrence route, and, no doubt, other companies will follow their example, as the trade of the country and the passenger business are so rapidly increasing.

The two last accidents on the St. Lawrence, that of the S.S. "*Prinz Oskar*," and the S.S. "*Aotea*," happened almost simultaneously, and the consequence is that, owing to the Graving Dock being occupied by the "*Prinz Oskar*," the "*Aotea*" is unable to have permanent repairs made in Quebec. It was thought for some time, to send her to New York for repairs. Should another steamer become a total wreck, as was the case with the Allan steamer "*Barbarian*," which was floated but was too large to be docked, there is no doubt that the Underwriters will assuredly take advantage of the mishap to increase the rates of insurance on the St. Lawrence route, which are now higher than to New York.

For all these reasons, which are of paramount importance to the Canadian trade, and to the good reputation of the St. Lawrence route, the commissioners hope that the Government will take the necessary steps towards the construction, with



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the least delay possible, of a modern dry-dock, capable of receiving any of the steamers now afloat, or likely to be afloat for years to come.

I have the honour to be,  
Sir,  
Your most obedient servant,

(SGD.) RAOUL RENAULT,  
*Secretary-Treasurer.*

#### CUSTOM HOUSE.

The commissioners have again during the year, particularly called the attention of the government to the inadvisability of rebuilding the Custom House on its ruins. Their reasons for asking the removal of the Custom House to a more suitable site are summarized in the following extract which formed part of a memorial forwarded to the Honourable the Minister of Public Works:—

“The Quebec Harbour Commissioners, fully aware of the great development that the water frontage in the Port of Quebec will have in the very near future, when the Transcontinental Railway and the Quebec Bridge are completed, together with the increased requirements of the local trade, and anxious as they are to retain the control of all the harbour lines, so as to give equal facilities to all the railway companies, wish to respectfully represent that the rebuilding of the Custom House on its old site will, owing to its location on the water edge, considerably impede the construction of Harbour Lines and the establishment of proper connections with the embankment via the Cross Wall.

In the event of its being rebuilt on the same site, the Custom House will, within two or three years, be encircled by several railway tracks, will be a constant danger to the public, and a continuous impediment to traffic.

For these reasons of paramount importance, the commissioners hope that the Government will reconsider their decision to rebuild the Custom House on the old site.

Attached to this memorial is a plan showing the railway connections and yarding accommodation required, involving the removal of the Custom House from its present location.

With the actual car ferry and the two car ferries contemplated by the National Transcontinental Railway Commission for next year, our proposed car ferry berth and car ferry yard will give adequate facilities to the actual interchange of cars between the railways now operating on both sides of the river.

I might add that the Commissioners have already offered, since the fire, to purchase from the Government the Custom House property.”

#### IMPROVEMENTS AT THE MOUTH OF THE RIVER ST. CHARLES.

The commissioners have called the attention of the Government to the importance of completing the improvements at the mouth of the River St. Charles.

The announcement is made of the construction of six large steamships, of some 20,000 tons displacement, and capable of steaming from 20 to 23 knots at sea, for the St. Lawrence route, to be in readiness in 1912. Those large vessels will overtax the actual accommodation available for vessels of this class requiring deep water docking and all the necessary facilities for the quick dispatch of their passenger traffic, and the rapid and cheap handling of their cargoes.



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The commissioners, therefore, with a view of giving the best accommodation possible to the considerable increase in the incoming shipping trade of the port, and in order to be in readiness when it comes, have strongly emphasized to the Government the vital importance of erecting, with the least delay possible, another pier, at the mouth of the River St. Charles, parallel with the one now being completed.

IMMIGRATION BUILDINGS.

The commissioners have also recommended to the Government the immediate construction of the proposed modern and fire-proof buildings on the embankment, for the Immigration Department.

This improvement is a matter of national importance to safeguard the lives of the ever increasing number of immigrants landing at this port, whose security is constantly threatened in the old wooden immigration quarters on the embankment.

The commissioners have granted additional space for the erection of the proposed new immigration buildings.

SITE FOR THE DEPARTMENT OF MARINE AND FISHERIES WORKSHOPS.

The Department of Marine and Fisheries' workshops will have to be removed to another location, to give room for the tracks and sidings of the National Trans-continental Railway, from the bridge to their station on the Champlain Market site.

When the commissioners became aware that the Department was anxious to secure a good site for their workshops, they offered a spacious piece of ground, 800,000 feet in area.

The site offered is situated at the mouth of the River St. Charles, north of the embankment, and comprises all the space between the proposed western embankment to and including Pier No. 4 on the plan of the Princess Louise Docks.

This site, in the commissioners' opinion, ought to prove an ideal one. It is within the city limits and it is also close to the basins where the Government boats seek winter quarters, and it offers excellent communications, by rail and water.

RETIREMENT OF MR. D. ARCAND.

By an order-in-council of June 29th, 1910, the resignation tendered by Mr. D. Arcand, as one of the representatives of the Government on the Harbour Commission, was accepted, and the Commissioners, upon hearing of the retirement of their colleague, unanimously adopted the following resolution:—

RESOLVED: That the Quebec Harbour Commissioners desire to place on record their sincere appreciation of the numerous services rendered to their board by their retiring colleague, Mr. Doseithée Arcand, who, for the last fourteen years, has been a member of their corporation. By his intimate knowledge of everything pertaining to navigation, for which he has a predilection, Mr. Arcand has contributed to the welfare of the shipping interests of the Port of Quebec.

APPOINTMENT OF MR. GEO. TANGUAY.

By the same order-in-council, enacting the acceptance of Mr. Arcand's resignation, Mr. George Tanguay was appointed in his room and stead, under the provisions of sub-section 2, of section 7 of the Quebec Harbour Commissioners' Act, 1899, and was sworn into office as one of the Government's representatives at the meeting of July 7th.



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## REPRESENTATIVE OF THE QUEBEC BOARD OF TRADE.

By the nomination of Mr. George Tanguay as one of the representatives of the Government on the Harbour Commission, the Quebec Board of Trade, which had been represented by him up to the time of his appointment by the Government, was left without a representative.

At the meeting of the Board of Trade held on July 12th, 1910, Mr. Tanguay's resignation was accepted, but the Council thought it fit to postpone the appointment of their representative on the Harbour Commission.

## ELECTION BY SHIPPING INTEREST.

At the meeting of the persons authorized to vote in conformity with the Act 62-63 Victoria, Chapter 34, sections 7 to 14, held in the Quebec Harbour Commissioners' Office, on the third day of August, in order to elect, for the ensuing three years, two members to represent the shipping interest on the Quebec Harbour Commission, Messrs. Lorne C. Webster and W. M. Dobell were re-elected.

## NOMINATIONS BY BOARD OF TRADE.

At special meetings of the Quebec Board of Trade and the Levis Board of Trade, held on the first day of August, Messrs. G. A. Vandry and S. C. Auger were respectively nominated to represent their respective body on the Quebec Harbour Commission for the ensuing three years, in conformity with the 62-63 Victoria, chapter 34, sections 7 to 14.

## DEATH OF MR. JAMES WOODS.

The commissioners have to record, with feelings of deep regret, the death, on the first of March, of one of their most faithful servants, in the person of their late Secretary-Treasurer, Mr. James Woods.

Mr. Woods had been in the service of the commissioners during thirty-four years, having been appointed clerk at the meeting of May 10th, 1876. Upon the retirement, in 1890, of Mr. A. H. Verret as Secretary-Treasurer, Mr. Woods was promoted acting Secretary-Treasurer, and was definitely appointed to that office at the meeting of September 30th, 1891, having thus held that office for over nineteen years.

During his long term of office the late Mr. Woods always devoted the best of his energy to the discharge of his important duties, and the commissioners wish to place on record their full appreciation of the many services rendered to their board by their late faithful servant.

## ACTING CHAIRMAN.

During the absence in Europe of the chairman, Mr. J. B. Laliberté, Mr. Roger LaRue was the presiding officer, having been unanimously elected by the Board as Acting Chairman.

## ICE CUTTING.

During the season of 1909-1910, 112,388 blocks of ice have been cut for local use.

The ice harvest has more than doubled during the last ten years, and care is taken that all the ice cut for domestic consumption is perfectly pure, and permission is given to cut it, only in localities where an analysis proves that it is fit for domestic purposes.



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Annexed to this report are the various statements conveying the information annually forwarded to your Department, and also a complete statement of the commissioners' operations for the year.

I have the honour to be,  
Sir,  
Your most obedient servant,

RAOUL RENAULT,  
*Secretary-Treasurer.*

QUEBEC, JANUARY 2nd, 1911.

RAOUL RENAULT, Esq.,  
Secretary-Treasurer,  
Harbour Commission.

SIR,—I have the honour to submit herewith the following, with reference to the various works in connection with the maintenance and improvement of the harbour accommodation, carried out by this Department during the past year.

To replace the buildings, on the Point-a-Carey Pier, destroyed by the fire of Oct. 16th, 1909, new landing sheds have been erected on the Tidal Harbour and River Fronts of the pier. The new Shed No. 19 has the same floor area as the original one. This building was completed, ready for use, on the opening of navigation last spring, and was first used by the *S. S. Athenia*, on the 26th of April. To replace Shed No. 21, a somewhat larger shed was erected. As the space formerly occupied by the Cold Store was available, the addition represents an increase in floor area of 5,280 sup. feet. 223 incandescient and 13 arc lamps were installed in these sheds. The building up of the wharves, where burnt down, was completed, the paving renewed, the site formerly occupied by Sheds Nos. 1 and 2 cleared of debris and filled in; a new roadway in macadam, was constructed from Dalhousie Street to Shed No. 21, the railway lines restored, and the whole of this pier put in good order.

Two new tracks have been laid down from the Car Ferry landing berth to the railway lines in Dalhousie Street.

A building containing a police station and a commissioners' store, has been erected on the Cross-Wall.

The commissioners having decided to establish a pontoon berth in the Custom House Pond, for the accommodation of coasting vessels, the pond has been dredged to a depth of 15 feet below water, by one of the dredges of the Department of Public Works; a pontoon for use at this berth is to be constructed during the winter, a contract for the supply of the required timber being given out this autumn.

The stone foundation for, and the concreting and paving of, the new carriage roadway, from the point where it diverges from the line of the former roadway to its western termination, a distance of 1,120 feet, have been completed. This part of the roadway has been paved with scoria blocks.

The new railway lines at the western end of the embankment, made necessary by the change in the position of the roadway, totalling a length of some 5,400 feet, have all been laid down and were put into service on the 14th of July last; the alteration in the position of the roadway and railway lines, has added an area of 87,000 square feet to the ground available for the reception of coal.



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The extension to the landing shed No. 20, referred to in the last annual report, was completed in the summer, the railway lines between the shed and the dock front were put into good order, and connected at the western end with the main line. The 2nd freight line on the shore side of the shed was reballasted and lined, the required additional lights installed, and the new part of the building painted.

The railway line along the wet dock front has been completed, and connected at its western end with the main line, an additional track has also been laid down to the Dominion Coal Co's. plant.

An addition of 90 feet in length has been added to the Empress Shed, and the two railway lines at the shore side have been extended to the northern end of the pier, thus giving service to the Landing Shed No. 25.

The Tidal Harbour face of the breakwater for about 10 feet in height has been rebuilt, and the sheathing of the river face renewed where defective. With a view to increasing the shed accommodation on this pier, the railway line has been removed from the water front and placed along the Tidal Harbour front. Tenders have been invited for the construction of a Strauss Bascule Bridge to span the entrance into the wet dock. This bridge will link up the commissioners' lines on the embankment and the Point-a-Carey pier; the foundation work required for this bridge is now under way.

The Commissioners' Grain Elevator, leased to Messrs. Richardson & Son, has been put into use by them and received the first cargo of grain on Nov. 15th last.

Six additional arc lamps have been placed on the embankment and one on the Point-a-Carey pier.

The minor repairs required to maintain the East India, Wellington, Atkinson and Reynar wharves and the buildings thereon in serviceable condition, have been effected.

The Northern Extension to the Breakwater (Pier No. 1) under construction by the Department of Public Works, is nearing completion, and will probably be entirely finished early next summer.

The Cross-Wall draw bridge was operated for the first time the past season, on the 2nd of April, and for the last time on December 7th.

The water was retained in the Wet Dock for the first time on the 20th of April, and for the last time on December the 6th.

I have the honour to be,  
Sir,  
Your obedient servant,

(SIGNED) ST. GEORGE BOSWELL,  
*Chief Engineer.*

QUEBEC, JANUARY 2nd, 1911.

RAOUL RENAULT, Esq.,  
Secretary-Treasurer,  
Quebec Harbour Commission, Quebec.

SIR,—I have the honour to submit the following with reference to the Harbour for the year 1910.

Navigation was open in the harbour all winter.

The C. G. S. *Montcalm* left the Custom House Basin for the Lower St. Lawrence on the 3rd March, and returned on the 6th.

The C. G. S. *Lady Grey* left the harbour for Three Rivers on the 16th March.



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SS. *General Wolfe*, with passengers, etc., left the Louise Docks for the Lower St. Lawrence on the 24th of March.

Passenger ferry *Mahone* arrived from the Lower St. Lawrence on the 25th of March.

Sloop *Souveraine* arrived from the Lower St. Lawrence on the 28th of March.

SS. *General Wolfe* returned from the Lower St. Lawrence with passengers and freight, on the 30th of March.

Navigation to and from the Lower St. Lawrence for steam and sailing craft was general on the 30th of March.

The ice in the Tidal Basin broke up on the 31st March.

The C. G. S. *Montcalm* and the C. G. S. *Lady Grey*, through their continued work at the ice between Quebec and Montreal, had the river clear by the 3rd of April, when the SS. *Lady Grey* arrived at Montreal.

The ice in the Wet Dock broke up on the 4th of April.

Car ferry *John S. Thom* was working in the harbour on the 4th of April.

The ice in the St. Charles River and north channel broke up on the 9th of April.

The SS. *Wobun*, Capt. James Meikle, first coal laden steamer, arrived in the harbour on the 9th of April.

SS. *Gaspesien*, Capt. Blouin, left the harbour for Montreal, on the 12th of April.

The Richelieu & Ontario Navigation Co. Steamer *Quebec* arrived from Montreal on the 15th of April, and returned on the same evening.

The first Richelieu & Ontario Navigation steamer, *Murray Bay*, for the Saguenay, left on the 17th of April.

Pontoons were placed in the harbour on the 14th of April.

SS. *Ionian*, first cargo steamer from sea, arrived in the harbour on the 25th of April.

SS. *Athenia*, Capt. Wm. McNeil, first passenger steamer, arrived in the harbour on the 26th of April.

No ballast was discharged into the harbour during the past season.

In addition to the routine work of the harbour and the office, six hundred and three (603) ocean going steamers have been berthed in the Louise Docks, Breakwater and Point-a-Carcy wharves.

These do not include a large number of steam barges, schooners, etc.

H.M.S. *Cornwall* arrived and anchored in the harbour on the 26th of October.

The last Richelieu & Ontario Navigation Co. steamer *Murray Bay*, from the Saguenay, arrived in the harbour on the 17th of November.

The last passenger and freight steamer, SS. *Montcalm*, of the Canadian Pacific lines, arrived in the harbour on the 2nd of November, and left with passengers and cargo on the 27th of November.

SS. *Wobun*, Capt. Jas. Meikle, last coal steamer from sea, arrived in the harbour on the 29th of November.

SS. *Amethyst*, Capt. Bernier, arrived in the harbour on the 1st of December.

SS. *Wobun*, Capt. Jas. Meikle, left for sea on the 1st of December.

Steam barge *Carleton*, Capt. Proulx, grain laden, arrived in the harbour on the 3rd of December.

SS. *General Wolfe*, Capt. Young, arrived from the Lower St. Lawrence with passengers and freight on the 5th of December.



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SS. *Aranmore*, Capt. John Hearn, arrived from the Lower St. Lawrence with passengers and freight on the 6th of December.

Passenger Steamer *Canada*, Capt. Bernier, from Lower St. Lawrence with passengers and freight, arrived in the harbour on the 6th of December.

C.G.S. *Montmagny*, left the harbour for Halifax on the 9th of December.

The ice in the Wet Dock formed on the 9th of December.

The ice in the Tidal Basin formed on the 12th of December.

C.G.S. *Lady Grey* left the harbour for the Lower St. Lawrence on the 22nd of December, at 6 a.m., returned the same night.

The ice in the north channel between the Island of Orleans and the mainland formed on the 27th of December.

Notices have been placed in suitable localities warning parties from discharging rubbish of any kind in the river, and every precaution is being taken to prevent any violation of the regulations of the commissioners in that respect.

I have the honour to be,

Sir,

Your obedient servant,

(SIGNED) JAS. C. SULLIVAN,

*Harbour Master.*

QUEBEC, JANUARY 3rd, 1911.

RAOUL RENAULT, Esq.,

Secretary-Treasurer,

Quebec Harbour Commissioners, Quebec.

SIR,—I have the honour to submit the following with reference to the traffic of the St. Charles Docks and wharves, showing the number of vessels, their registered tonnage, amount and description of cargo landed and shipped from the docks during the season 1910:—

INWARDS	347 Vessels.	1,578,135 tons register.
	57,981 Tons	General Cargo.
	8,898	“ Bricks.
	288	“ Drain Pipes.
	2,080	“ Slag.
	5,336	“ Salt.
	3,671	“ Molasses and Sugar.
	1,284	“ Cement.
	141,771	“ Bituminous Coal.
	19,478	“ Bituminous Coal, ex-propellers.
	42,626	“ Anthracite Coal.
<hr/>		
Totals. . . .	263,413	“



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OUTWARDS	95 Vessels, 341,633 tons register.
	23,698 Tons General Cargo.
	1,728 " Pulp.
	1,108 " Asbestos.

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Totals. . . .	26,525 "
	30,803 P. S. Lumber and Timber.

LOWER PORT STEAMERS.

Landed 2,861 tons General Cargo.  
Shipped 10,065 tons General Cargo.

GRAIN LANDED BY PROPELLERS AND BARGES.

Landed 157,487 bushels of grain.

TIES LANDED BY SCHOONERS AND BATEAUX.

148,060 pcs. railway ties were landed.

VESSELS USING THE DOCKS FOR SURVEYS AND TEMPORARY REPAIRS.

SS. *Grampion* having touched at Cap à la Roche, came into the Louise Basin, made temporary repairs, loaded and went to sea.

SS. *Aotea* having been ashore at River Claude, near Martin River, came back, went into the inner basin, discharged her coal, made temporary repairs, loaded lumber, and went to sea.

SS. *Manchester Engineer*, been ashore at Belle Isle, came up and went into the inner basin, discharged a part of her cargo of lumber, went over to Graving Dock for repairs, came back, re-loaded her cargo of lumber and went to sea.

SS. *Craigendoran* went ashore at Anticosti, came up to Louise Basin, survey was held, discharged a portion of her deck load, and went to sea.

SS. *Cassandra* having touched at Cap à la Roche, came into the Louise Basin, survey was held, and having been found sea-worthy, went to sea.

There are wintering in Louise Docks, lumber, coal, railway ties, etc., etc.

During the year spaces were rented at low rates for storage on coal, landed and removed from water front.

The surface traffic required the employment of 18,142 cars during the season.

During the past season the different mail steamers landed:—

10,497	1st Class	Passengers.
43,963	2nd	" "
107,870	3rd	" "

The second and third class passengers were forwarded to their future homes by the different railway companies.

There are stored in the different freight sheds, salt, cement, slag, pulp, etc., etc.

The Dominion Coal Company have 12,000 tons of coal stored on space rented to them.

The Nova Scotia Steel & Coal Co. have 10,000 tons of coal stored on their space.



The docks are occupied during the winter months by a large number of vessels of various tonnages, where they find safe quarters until the opening of navigation.

I have the honour to be,  
Sir,  
Your most obedient servant,

(SIGNED) P. FLYNN,  
*Wharfinger.*

COMPARATIVE STATEMENT OF THE REVENUE OF THE QUEBEC HARBOUR  
COMMISSIONERS FOR THE YEARS 1909 AND 1910.

	1909	1910	DIFFERENCE IN 1910.	
	\$ cts.	\$ cts.	\$ cts.	
Tonnage Dues. . . . .	7,734 31	8,593 47	859 16	Increase.
Import Dues. . . . .	6,137 63	5,430 43	707 20	Decrease.
Export Dues. . . . .	3,619 60	2,439 50	1,180 10	Decrease.
Harbour Dues. . . . .	2,954 74	3,712 88	773 14	Increase.
Earnings of Docks, Wharves and Stores. .	78,233 45	95,344 62	17,111 17	Increase.
Beach and Deep Water Lots. . . . .	1,264 99	1,157 03	107 96	Decrease.
Interest. . . . .	2,221 12	4,347 91	2,126 79	Increase.
Fines. . . . .	. . . .	11 00	11 00	Increase.
	102,165 84	121,036 94	18,871 00	Increase.

RAOUL RENAULT,  
*Secretary-Treasurer.*

Harbour Commissioners' Office,  
Quebec, January 2nd, 1911.



REVENUE AND EXPENDITURE.

Cr.

Dr.

1910		\$	cts.	1910		\$	cts.
Dec. 31	To Tonnage dues. . . . .	8,593	47	Dec. 31.	By Administrative, Engineering Staff, Salaries and fees. . . . .	19,153	70
	Import dues. . . . .	5,430	43		Legal expenditure. . . . .	2,371	95
	Export dues. . . . .	2,439	50		Notarial expenditure. . . . .	97	00
	Harbour dues. . . . .	3,712	88		Miscellaneous expenses, printing, stationery, advertising, Harbour Master's service, general labour, etc. . . . .	12,976	50
	Wharf and Property Earnings:				Workmen's liability. . . . .	329	28
	To East India Wharf. . . . .	1,565	76		Property expenditure, taxes, insurance, repairs, etc., and the maintenance of docks, wharves and stores. . . . .	52,078	73
	Grand Trunk wharf. . . . .	2,000	00		12 months' interest on bonds, 62-63 Victoria (chap. 34 and 6-7 Edward VII, chap. 36. . . . .	30,000	00
	Wellington's wharf. . . . .	2,556	67		Surplus . . . . .	4,029	68
	Atkinson's wharf. . . . .	2,636	66				
	Reynar's wharf. . . . .	1,200	00				
	St. Charles docks and wharves . . . . .	85,385	53				
	Beach and deep water lots. . . . .						
	Interest. . . . .	95,344	62				
	Fines. . . . .	1,157	03				
		4,347	91				
		11	00				
		121,036	84				
						121,036	84

Harbour Commissioners' Office,  
Quebec, January 2nd, 1911.

RAOUL RENAULT,  
*Secretary-Treasurer.*



1-2 GEORGE V., A. 1911

EXPENDITURE ON CAPITAL ACCOUNT DURING YEAR 1910.

	\$	cts.	\$	cts.
Tool's account.	\$780	99		
Office Furniture. ....	674	31		
			\$1,455	30
Securing Dock Walls:				
M. P. & J. T. Davis, Contract No. 1.....	30,000	00		
Contract No. 2. ....	10,000	00		
			40,000	00
Shed No. 19. ....	7,448	61		
Shed No. 20, Extension. ....	18,277	24		
Shed No. 21. ....	10,521	31		
C. P. R. Shed Extension. ....	2,411	77		
Police Station & Warehouse. ....	2,280	68		
Cross Wall Railway Bridge. ....	2,199	72		
			43,139	33
Sundries. . . . .			25,637	75
Roadway. ....			17,501	58
			\$127,733	96

RAOUL RENAULT,  
*Secretary-Treasurer.*

Harbour Commissioners' Office,  
Quebec, January 2nd, 1911.



ASSETS AND LIABILITIES AS PER BALANCE SHEET.

ASSETS.		LIABILITIES.	
\$	cts.	\$	cts.
Real Estate—		Quebec Harbour Debentures. . . . .	
St. Charles docks and wharves . . . . .	4,276,614 35	Receiver General. . . . .	3,612,802 42
Wellington wharf. . . . .	86,945 39	Dominion Government, securing and deepening dock walls. . . . .	13,380 00
Grand Trunk wharf. . . . .	15,740 26		541,393 26
Atkinson's wharf. . . . .	55,431 50		4,197,575 68
East India wharf. . . . .	48,896 64		
Reynar's wharf. . . . .	9,918 29		
Elevator & Brick Building. . . . .	40,000 00	Quebec Harbour Bonds, 62-63 Victoria Chapter 34. . . . .	350,000 00
		Interest due 1st January. . . . .	3,000 00
Cash on hand. . . . .	300 06	Quebec Harbour Bonds, 6-7, Edward VII, Chapter 36. . . . .	400,000 00
La Banque Nationale. . . . .	108,968 69		753,000 00
Deepening & strengthening dock walls:—		Accounts payable. . . . .	29 17
M. P. & J. T. Davis, . . . . .	163,114 56	Beach and deep water lots. . . . .	54,523 73
Contracts No. 1 and 2. . . . .	16,666 06	Profit and loss. . . . .	624,721 44
Contingents. . . . .	42,448 58		
Cross Wall bolting. . . . .			5,629,850 02
In re Beach and deep water lots—			
Capital at debit "Sundries". . . . .	31,479 22		
Arrears of interest 24th June, 1910. . . . .	8,106 68		
Arrears of interest, 24th Dec., 1910 . . . . .	797 68		
Unsettled claims against Dominion Government—			
Dept. of the Interior. . . . .	337,591 84		
Dept. of Public Works. . . . .	25,424 47		
Commissioners, lifting barge.	5,644 45		
Graving Dock revenue acct. and. . . . .	4,556 54		
Dredge. . . . .	5,105 21		
Hopper Barge. . . . .	5,609 28		
Material on hand. . . . .	7,011 93		
Office Furniture. . . . .	5,041 43		
Tools. . . . .	6,316 06		



ASSETS.	LIABILITIES.			
	\$	cts.	\$	cts.
Jackscrews. . . . .		394 87		
Anchors. . . . .		264 38		
Pile Driver. . . . .		527 66		
Deck Scow. . . . .		2,830 38		
			43,302 19	
Rents, Wharfage, etc.—				
Sundries as per Balance Sheet. . . . .			14,653 43	
Suspense Account . . . . .			3,150 13	
			<u>5,629,850 02</u>	
				<u>5,629,850 02</u>

The arrears of interest due to or by the Dominion Government is not included in this statement.

Harbour Commissioners, Office,

Quebec, January 2nd, 1911.

RAOUL RENAULT,  
*Secretary-Treasurer.*

We hereby certify that we have examined the statement of Assets and Liabilities of the Quebec Harbour Commissioners, and we find the same in all particulars, the true position of the Trust to the 31st of December, 1910, as per the books and vouchers.

Quebec, April 12th, 1911.

J. G. LAPOINTE,  
ARTHUR E. SCOTT,  
*Auditors.*



SESSIONAL PAPER No. 23

HARBOUR COMMISSIONERS' OFFICE,

QUEBEC, APRIL 12th, 1911.

To the Chairman and Commissioners,  
Quebec Harbour Commission,  
Quebec.

DEAR SIRS,—We beg to report that we have examined the books and vouchers of the Commission and find them correct and in accordance with Balance Sheet presented, which is a true position of the Corporation as at 31st Dec., 1910.

We have to thank Mr. Renault, Secretary-Treasurer, for assisting us in our work in every manner in his power.

We have the honour to be,

Sirs,

Your obedient servants,

(SGD.) J. G. LAPOINTE.

ARTHUR E. SCOTT,

*Auditors.*



## APPENDIX No. 3.

THREE RIVERS HARBOUR COMMISSIONERS' REPORT FOR THE  
YEAR 1910.

## COMMISSIONERS:

P. A. DROLET, Chairman.

JOS. L. FORTIN,

L. E. DUFRESNE,

J. A. PELTIER,

L. P. NORMAND,

GEORGES BALCER, Secretary.

The season of navigation 1910, not more than the season of 1909, had cause for special rejoicing. If our ocean traffic—still forcibly reduced to a fraction only of our proper resources—continued its normal progression, shipments to the United States had such a falling off that the direct export traffic for the year shows, in the main, only a fair average.

In 1910, we registered 53 S. S. and 100,000 tons against 47 S. S. and 100,000 tons in 1909; 44 S. S. and 86,000 tons in 1908, and only 30 S. S. with 56,000 tons in 1907.

In regard to this partial recovery of about 13% in the ocean traffic, the number of canal boats declined from 1179 to 772—a loss of not less than 33%. Such abnormal falling off, however, in the traffic with our neighbors is easily explained. The previous year the American lumber interest had every reason to fear the action of the Quebec Government, re: the prohibition of export of pulpwood from its crown lands. Strenuous efforts were thus made to ship as much as possible before the fatal moment arrived. And nearly 100,000 cords were shipped from over our wharves in 1909, against only an average of 55,000 in former years and 65,000 cords up to September the 1st, 1910.

Last year's hope for a brisker trade in lumber with the British market also failed to realise, although our shipment in that direction attained 15 million feet against only 12 million the year before. But the American demand being at the same time reduced from 25 millions to 18 millions, our direct export of lumber finally fell off by several million feet. But here again we have to remember that the shipping of both pulpwood and lumber ceased almost entirely after the month of September, 1910.

*Imports:*—Coal from the lower provinces continued to increase, in spite of a number of our larger industrial establishments now using electricity for their motive power. Pig iron, sulphur, clay, etc., per ocean vessel, came up to the average. But the greater part of raw material, cotton for the mills at Three Rivers and Shawinigan, and "Matières premières" for other industries continued to arrive from and via the United States in constantly increasing quantities, by rail and by river-crafts.



## SESSIONAL PAPER No. 23

*Exports:*—The entire out-put of our pulp and paper mills; of our cotton factories; our aluminium, carbide, iron castings and other manufactures, each and every one in increasing quantities—the greater part for home consumption or for the United States—some for export to Australia and South Africa. Certain quantities of lumber—all our hay and dairy products, the products of the fields and farms—continued to be shipped as before, by rail and by water, via Montreal for various destinations, and others merely for transshipment on steamers to British and foreign markets.

---

While thus the season of navigation 1910, had nothing particular to boast of; and notwithstanding the sorely felt general depression in our local life and every day conditions—unfortunate and deplorable consequences of the disastrous conflagration of 1908—the year 1910, in the light of the actual economical and industrial development in both the city and district of Three Rivers, may—on the other hand,—well be considered as one of the most important in the history of our population.

Already in the remote past, shrewd business men had known how to appreciate and exploited with profit a conspicuous situation, by establishing direct trade connection with the products of our soil and our forest, our fisheries and our furs, even under the “Ancien Regime”—between Three Rivers and France, then with Great Britain, the West Indies and the old colonies of the United States, and in return received the products and manufactures from foreign countries. Thus over a century ago, ocean vessels moored at our wharves.

In spite of a long period of depression and indifference which followed, our faith in the destiny of this section of the country never altered. If in the course of time, our views varied as to details and opportunity, we never ceased drawing the attention of the interested parties to the particularly favourable situation of our port and harbour; the value of our resources, the many possibilities of the future. Undisturbed by the smile of the genial sceptic nor by the unexpected—we continued insisting upon government to provide accommodation for larger ocean traffic; facilities and space for more and more important manufactures, in a port and city where geographical conditions and nature have done more than their share. With the Maritime and Transport Cos., we dwelt upon the facilities of concentrating and shipping freight by rail and by water, to and from every corner of the Dominion, and by sea to every corner of the globe. With the commercial, industrial and agricultural corporations; with the capitalist and the financier, we discussed the variety of production and richness of our soil; our vast timber limits, our immense water-power, our iron deposits, further mineral and other yet only partly known wealth, etc.

But far as our expectation might have gone, we never expected to be confronted by facts and figures so strikingly expressive as during the last twelve months, which clearly demonstrate that, after all, we have not been mistaken.

Ten years ago Shawinigan, as a village did not even exist; fifteen years ago the modest pulpmill at Grand Mère scarcely dreamed of ever producing paper; La Tuque was but a lumbering camp, and Grès Falls driving an ordinary sawmill. Today in the first named place we count, beside half a dozen minor establishments, the extensive plant of the Shawinigan Water & Power Co. The Belgo-Canadian Pulp & Paper Co., the Northern Aluminium Co., the Shawinigan Carbide Co., and quite recently, the important Shawinigan Cotton Manufacture. At the Grand Mère, the imposing and now well known Laurentide Pulp & Paper Mill. At La Tuque, the Quebec & St. Maurice Industrial Co., and several others under consideration. The Grès Falls passed under the control of the Shawinigan Water & Power Co., for further development of energy. And all and every one of these establishments, at present connected by rail with the deep water wharves at



Three Rivers —are running full speed, producing year in and year out, millions of dollars worth of products and thousands upon thousands of horse-power of electricity, giving work and occupation to thousands of our people.—And if any one is curious to know about the financial standing of either of these enterprises, he might be interested seeing the Shawinigan Water & Power Co., for instance, which scarcely a few years ago appeared in a very timid way on Stock Exchange at 50 or 60, passing with a five or six times increased capital to the 100 mark; and the Laurentide Paper Co., under similar circumstances, figuring over 200.

In the city of Three Rivers, where for a long time the lumber industry, with the St. Maurice and the Radnor Forges, furnished, practically alone, employment and traffic for our population—it took some 30 years to bring into existence our well known Coffin & Silver Plating Co., our two large Glove Manufacturing Cos., our Shoe & Leather Co., the notable Canada Pipe Foundry, the Siegwart Beam Co., and about a dozen other, more or less important manufacturing establishments.

A decidedly more radical change began to operate when some three or four years ago a large cotton plant—the “Wabasso” for the finer grades of cotton fabrics—was established in our city. Under the impulse of the phenomenal development in the economical life of the nation, and the more and more rapid increase of population in the Dominion—a few men—well known in commercial and financial circles, after carefully examining the situation, took hold upon a vast project, centering in and around Three Rivers the various branches of the Cotton Industry of Canada, and no sooner the first division of this industry was under control, than began the construction of the knitting mill at Shawinigan, followed by the Whiteware Manufacture in Three Rivers (which section doubled inside the year) only to be followed again by the erection—as soon as the ground will be clear of snow—of even a larger establishment, *i.e.*, the printed Cotton Mill.

But this is not all:—

By the action of the Quebec Government, forcing the timber cut on public land to be partially manufactured in Canada—the American holder of such limits will now have to turn part of his wood into pulp, on this side of the line. And already we see a new pulp-mill in course of construction by the Grés Falls Coy., soon to be followed by other companies, under similar circumstances. But with the prospect for the American paper industry to be barred from their usual supply of pulpwood, and the ever increasing demand for paper, more than ever the attention of the interested parties is now directed upon our vast timber limits. Nothing surprising, therefore, when one day last fall a transaction of no ordinary nature became public. The old and well known lumber establishment of Alexander Baptist, passed into the hands of a syndicate, who intend—not only continuing producing lumber for export, but to erect a most modern, first class plant for the manufacture of pulp and paper on a very large scale.

To give an idea of the meaning and importance of the present move, the moment the Three Rivers transaction was known, rumour started about the forming of a powerful company for the acquisition or union of most of the pulp and paper mills along the river and the territory of the St. Maurice, with the intent, not to control the market in view of a merciless combine, but to centre the interest of all concerned for a more judicious working of the plants, the direction of the shipping and the regulation of the manufacture, so as to supply, under most favourable conditions, the home as well as the foreign markets with every kind of paper desired. . . . .

An even more curious outcome from the same transaction, was the offer from an American firm to pay an amount nearly as high as the purchase price, for the simple privilege of cutting, upon the limits, the timber not fit for paper



## SESSIONAL PAPER No. 23

making *i. e.*, pine, hemlock, etc. And here may be mentioned that up to the present, no pulpwood has been cut on the 1,112 square miles of the Baptist's timber limits.

With such results already obtained, and similar prospects in view—Three Rivers has cause to be satisfied, and no reason whatever to worry about the future.

GEO. BALCER,  
*Secretary.*

STATEMENT of number and tonnage of steamers entered inward and outward of the port and out-ports of Three Rivers, for the year 1910

## OCEAN TRAFFIC—PORT OF THREE RIVERS.

RETURN OF VESSELS INWARD.			RETURN OF VESSELS OUTWARD.		
Nationality.	No.	Tons.	Cleared for	No.	Tons.
British. . . . .	38	90,962	Inland ports. . . . .	27	46,575
Norwegian. . . . .	9	15,932	Great Britain. . . . .	25	64,669
Danish. . . . .	1	1,182	Cuba and Mexico. . . . .	1	2,046
Canadian. . . . .	5	5,211			
	53	113,290		53	113,290

## UNITED STATES TRAFFIC.

	Number	Tons
Port of Three Rivers, United States steam barges. . . . .	8	6,539
Port of Three Rivers, United States canal boats. . . . .	674	73,452
Out-ports Three Rivers, United States canal boats. . . . .	90	9,202
	772	89,193

## INLAND TRAFFIC.

Bateaux not registered. . . . .	30	
Schooners and barges. . . . .	161	47,509
Tugs and steamboats. . . . .	199	34,460
	390	81,969

## RECAPITULATION.

Ocean traffic. . . . .	53	113,290
United States traffic. . . . .	772	89,193
Inland traffic. . . . .	390	81,969
	1,215	284,452

Exclusive of Richelieu & Ontario Navigation Co's steamers, local craft and market boats



1-2 GEORGE V., A. 1911

## HARBOUR COMMISSIONERS of Three Rivers.—Receipts and Disbursements for the year 1910.

RECEIPTS.	DISBURSEMENTS.
COMMISSIONERS' OFFICE.	ADMINISTRATION.
Tonnage dues. . . . . \$ 439 93 Harbour dues inwards. . . 73 60 Harbour dues outwards. . 1,546 08 Commutation. . . . . 810 00 Rent of wharves and moorage. . . . . 1,184 25 \$4,053 86	Current Expenses. . . . \$ 599 13 Salaries & commission. 3,476 98 Printing & stationery. . 127 25 \$4,203 36 Repairs and Gen. Har- bour expenses. . . . . 2,239 79 Interest on debentures. 9,528 95 Sinking fund. . . . . 1,905 00 \$11,433 95 Total expenses on Revenue. . . . . \$17,877 10 Outstanding account. . . . . 287 29 Deposit in bank and cash. . . . \$14,421 19 December 31st, 1910. . . . . 98 37 13,519 56 Grand total. . . . . \$31,683 95
CUSTOM HOUSE.	
Tonnage dues on vessels \$3,199 69 Harbour dues inwards. . . 7,343 64 Harbour dues outwards. . 2,562 88 Moorage dues. . . . . 459 68 \$13,565 89	
Total receipts. . . . . \$17,619 75 Accounts not collected. . . . . 287 29 Interest on deposits. . . . . 154 49 Deposit in bank and cash Dec. 31st, 1909 . . . 13,622 42 \$31,683 95 Grand total. . . . .	

GEORGES BAICER,  
Secretary-Treasurer.



## APPENDIX No. 4.

REPORT OF THE TORONTO HARBOUR COMMISSIONERS FOR THE  
YEAR ENDING DECEMBER 31, 1910.SECRETARY OF THE HARBOUR TRUST IN ACCOUNT WITH THE COMMISSIONERS FOR  
THE YEAR ENDING 31ST DECEMBER, 1910.

## GENERAL BALANCE SHEET.

Wharf property.....	\$43,073 72	By balance to credit of profit and	
Office furniture.....	393 88	Loss. ....	\$77,788 75
Canada Per; Bonds.....	14,000 00		
City of Toronto bonds.....	5,000 00		
Central Canada Loan & Savings			
Co.; bond.....	5,000 00		
Imperial Trust Co., of Canada,			
deposit.....	5,000 00		
Bank of Toronto; deposit.....	5,312 06		
Cash on hand.....	9 09		
	<hr/>		<hr/>
	\$77,788 75		\$77,788 75

We have examined the books and vouchers, and have compared the balance sheet with the said books and vouchers, and certify the same to be correct, and to represent a true statement of the affairs of the Trust, at this date: December 31st, 1910.

S. BRUCE HARMAN,  
SYDNEY H. JONES,  
*Auditors.*

F. S. SPENCE, Chairman,  
JAS. T. MATHEWS, Vice-Chairman,  
W. H. PEARSON, Junior,  
J. T. V. MAY, Alderman,  
ALBERT WELCH, Alderman.  
*Commissioners.*

C. W. POSTLETHWAITE,  
*Harbour Master.*



PROFIT AND LOSS.			
Dr.		Cr.	
Solicitors' professional services. . . .	\$ 15 00	Balance from ledger. . . . .	\$76,366 55
Prem. on fidelity bond. . . . .	8 00	Canadian Pacific Railway. . . . .	4,000 00
Deputation to Ottawa. . . . .	17 35	City of Toronto, rent. . . . .	2,000 00
Written off furniture account. . . . .	44 00	Interest on deposits. . . . .	408 85
Fire insurance, Com., Union Co. . . .	33 40	Premium and interest account. . .	731 32
Commissioners' fees, etc. . . . .	550 00	Harbour dues. . . . .	7,320 04
Printing and stationery. . . . .	92 50		
Dredging. . . . .	7,951 40		
Salaries. . . . .	2,540 00		
Lights; buoys and beacons . . . . .	613 54		
General repair account. . . . .	430 82		
Office expenses and rent. . . . .	742 00		
Balance to credit of profit and loss.	77,788 75		
	\$90,826 76		\$90,826 76

Audited and found correct,  
  
Toronto, 6th January, 1911.

S. BRUCE HARMAN,  
SYDNEY H. JONES,  
*Auditors.*

RECEIPTS AND EXPENSES.			
RECEIPTS.		EXPENDITURE.	
Cash on hand January, 1910. . . . .	\$13,854 95	Dredging account. . . . .	\$7,951 40
Canadian Pacific Railway. . . . .	4,000 00	Salaries. . . . .	2,540 00
City of Toronto, rent. . . . .	2,000 00	Lights, buoys and beacons, in-	
Harbour dues. . . . .	7,320 04	cluding purchase of motor boat.	1,045 04
Interest on deposits. . . . .	408 85	Office expenses and rent . . . . .	742 00
Premium and interest. . . . .	731 32	Commissioners' fees. . . . .	550 00
City allowance for buoys. . . . .	100 00	General repairs. . . . .	430 82
Sale of motor boat. . . . .	300 00	Fire insurance. . . . .	33 40
Insurance, damage to boat. . . . .	31 50	Printing and stationery. . . . .	92 50
		Deputation to Ottawa. . . . .	17 35
		Solicitors' account. . . . .	15 00
		Imperial Loan & Savings Co.,	
		Association. . . . .	5,000 00
		Central Canada Loan & Saving	
		Company. . . . .	5,000 00
		Cash on hand and in Bank of	
		Toronto. . . . .	5,321 15
		Fidelity insurance. . . . .	8 00
	\$28,746 66		\$28,746 66

Audited and found correct.  
  
Toronto, January 6th, 1911.

S. BRUCE HARMAN,  
SYDNEY H. JONES,  
*Auditors.*



## SESSIONAL PAPER No. 23

## COMPARATIVE STATEMENT.

Goods arrived at the Port of Toronto during the years 1909-10.

Description of goods.	1909	1910
General merchandise. . . . . tons.	64,809	81,833
Coal. . . . . "	123,373	127,916
Lake stone. . . . . toise	7,174	11,361
Fruit. . . . . bbls.	92	210
" . . . . . crates	9,611	10,997
" . . . . . baskets	288,680	16,257
Bricks.	397,000	313,000
Grain. . . . . bushels	700	1,230
Horses, carriages and horned cattle. .	242	259
Ice. . . . . tons	5,249	8,416
Oil in bulk. . . . . bbls	68,384	103,535
Calves. . . . .		7

## SIXTIETH ANNUAL REPORT.

*To the Commissioners of the Harbour of Toronto:—*

GENTLEMEN,—I have the honour to submit my report for the year 1910.

The harbour was clear of ice on March 20th, having been frozen over for 81 days, or three days longer than in 1909.

The first vessel to arrive was the S. S. "*Macassa*," Captain Henderson, on March 28th, with passengers and cargo from Hamilton.

The last arrival was the S. S. "*Renvoyle*," Captain Redfearn, on December 5th, with 2,378 tons of coal, the heaviest cargo of coal ever brought into this harbour.

The number of arrivals of vessels this year is 3,402, an increase of 461 over the arrivals for 1909.

Below is a comparative statement of arrivals and tonnage:—

	1909	1910	Decrease.	Increase.	Registered Tonnage.	
					1909	1910
Propellers. . . . .	518	729		211	287,314	360,386
Steamers. . . . .	2,064	2,262		198	1,152,389	1,170,650
Sailing craft. . . . .	359	411		52	40,589	51,925
	2,941	3,402		461	1,480,292	1,582,961

The year commenced with a cash balance of . . . . . \$13,854 96

Receipts for the year from all sources. . . . . 14,891 70

—————\$28,746 66

Expenses for the year. . . . . \$13,425 51

Central Canada Loan & Savings Co. Bond. . . . . 5,000 00

Imperial Loan & Savings Asso. Deposit. . . . . 5,000 00

Cash on hand and in bank. . . . . 5,321 15

—————\$28,746 66



Coal receipts for the year are as follows: Anthracite, 93,586 tons; Bituminous, 34,330 tons; in all 127,916 tons, or 4,542 tons more than in 1909.

The total quantity of coal imported into this port by rail and vessel during the year, per returns from the government is as follows:—Anthracite, 671,826 tons; Bituminous, 558,301 tons; in all 1,230,127 tons, or 98,399 tons more than last year.

The increase in the quantity of coal carried by vessels is not in proportion with the increase in that carried by railways, and this must be more and more noticeable each year, for as the city extends towards the north and west, the railways can deliver coal almost at the consumers doors, while the vessel trade is handicapped by the long cartage haul.

The highest water for the year was 19½ inches above zero, on the 5th June; the lowest water was 8 inches below zero on the 26th of December. Mean for year 7½ above zero or 5½ inches below last year.

The harbour buoys were placed in position on the 26th of March, and were taken in on the 8th of December.

The lights at the Queen's Wharf were lighted for the first time on the 28th of March, and were discontinued on the 8th of December.

There are 82 vessels wintering here this season, with several dredges and derricks, viz.—11 passenger steamers, 6 propellers, 8 steam tugs, 2 schooners, 6 steam yachts, 34 sailing yachts, 4 tow barges, and 11 ferry steamers, representing about 19,654 tons register.

The cost of dredging has been very considerable this year, owing to new cuts being made to Haney & Miller's new dock and opening the Alexander Brown Milling Co's wharf slip; this is entirely new work and may be considered permanent improvements. I think the time has come when dredging at the face of docks should be discontinued and the efforts of the commissioners confined to keeping the slips and the entrances thereto navigable for vessels drawing fourteen feet of water. If this plan were adopted the owners of wharves would be compelled to extend their wharves to the wind-mill line, which was a city regulation twenty years ago. We should then have a uniform line of docks instead of the zig-zag line now existing, and the appearance of our waterfront would be greatly improved.

Dredging was done at the following localities, the contractor, Mr. John E. Russell, giving entire satisfaction.

At Princess street.....	22,921 cubic yards.
At West Market street.....	10,370 " "
At Brock street.....	6,284 " "
At Church street.....	2,926 " "
At Scott street.....	665 " "
At Yonge street.....	553 " "
	-----
	43,719 " "

The second hand motor boat purchased last year was sold this spring for its cost price, and a new and larger one, built by Buttler & Co., of Brighton, was procured in its stead; the new craft has answered all our expectations and the purchase has proved satisfactory.

Mr. R. T. Stupart, Director of the Toronto Obersvatory, reports as follows:—

The display of storm signals on the Great Lakes for the season of navigation of 1910, was resumed on the 5th of April, and discontinued on the 10th December. During the interval, storm signals were hoisted at the Eastern Gap and the Queen's wharf, the two display stations for Toronto, on fourteen occasions, thirteen of which were justified by subsequent gales and one was not verified. The season throughout was very free from heavy storms, the autumn especially so, and of the



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storms which were experienced, on only three occasions, was the force of a fresh or strong gale attained. The heaviest storm occurred on the 25th April, and it was from the eastward with a velocity of 54 miles an hour.

J. G. Sing, C. E., Engineer-in-Charge, Public Works Department, Ottawa, reports as follows:—

During the past year repair work has been steadily going on at the Eastern entrance to the harbour. All the rods and bolts holding the close piling to the channel face of the Eastern pier have been renewed and tightened, where necessary, until it is in good condition. The superstructure of the North end of the East pier for an area of 32 feet x 34 feet has been rebuilt in concrete, also the pier head at the south end of the East pier. 101 feet x 40 feet has been rebuilt of reinforced concrete and is not only a very substantial piece of work, but is an ornament to the harbour entrance.

The work of constructing the new western entrance to the harbour has been carried on very diligently by the contractor, R. Weddell, Esq., and should be entirely completed early in 1911. All the crib-work, viz., 2,535 feet on the south and 2,235 feet on the north side, is completed and concrete blocks and side walls on the south pier are completed, leaving only the deck to be put on, while on the north pier about half the concrete blocks have been set and 700 feet of side wall.

The dredging of the channel is practically completed to a minimum depth of 18 feet below zero of the harbour commissioners' gauge.

The precipitation for the year is as follows, viz.: Rainfall, 26.545 inches. Snow reduced to water, 7.19 inches; in all 33.735 inches, or about three-quarters of an inch more than in 1909.

I am, Gentlemen,

Your obedient servant,

COLIN W. POSTLETHWAITE,

*Harbour Master.*

## COMPARATIVE STATEMENT.

Receipts and Expenditure for the years 1908-9-10.

RECEIPTS.				EXPENDITURE.			
	1908	1909	1910		1908	1909	1910
	\$ cts.	\$ cts.	\$ cts.		\$ cts.	\$ cts.	\$ cts.
Can. Pacific Rail- way . . . . .	4,000 00	4,000 00	4,000 00	Solicitors' Fees . . .	13 00	40 00	15 00
City of Toronto . .	1,000 00	2,000 00	2,000 00	Deputation to Ottawa.		55 25	17 35
Harbour dues . . .	6 38 16	6,446 21	7,320 04	Fire insurance . . . . .	45 00	17 50	33 40
Interest on bonds . .	809 20	731 32	731 32	Commissioners' fees, etc.	500 00	300 00	550 00
Interest on de- posits . . . . .	287 57	317 00	408 85	Lights, buoys and beacons . . . . .	472 20	528 41	1,045 04
Water Works Dept. . . . .	100 00	100 00	100 00	General repairs . . . . .	907 43	220 34	430 82
Fines—Speed by law . . . . .		40 00		Printing & stationery . .	49 00	63 62	92 50
Sale of motor boat . . . . .			300 00	Dredging . . . . .	1,033 48	6,308 57	7,951 40
Fire insurance . . .			31 50	Office expenses and rent . . . . .	526 29	713 90	742 00
				Salaries . . . . .	2,540 00	2,540 00	2,540 00
	12,843 03	13,634 53	14,891 71		6,206 88	10,787 59	13,417 51



APPENDIX No. 5.

REPORT OF THE HARBOUR COMMISSIONERS OF NORTH SYDNEY,  
N.S., FOR THE CALENDAR YEAR ENDED DECEMBER 31, 1910.

NORTH SYDNEY, N.S., FEBRUARY 1st, 1911.

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,

SIR,—The Harbour Commissioners beg to hand you herewith enclosed state-  
ment of receipts and expenditures for the year ending December 31st, 1910; also  
list of shipping that entered at the Ports of Sydney during 1910, and quantity of  
coal shipped.  
Navigation was open during the whole of the year 1910.

Your obedient servant,  
  
WM. HACKETT,  
*Secretary.*

NORTH SYDNEY, C.B., FEBRUARY 1st, 1911.

SHIPMENTS:	Tons.
Dominion Coal Co., Ltd., from their pier, Sydney, coal shipped. . . . .	1,743,031
Nova Scotia Steel & Coal Co., Ltd., North Sydney, coal shipped. . . . .	529,487
Nova Scotia Steel & Coal Co., Ltd., North Sydney, iron ore received. . . . .	144,891
Dominion Iron & Steel Co., Ltd., iron ore, limestone and other material received. . . . .	947,000
Dominion Iron & Steel Co., Ltd., steel rails shipped. . . . .	63,000

LIST OF SHIPPING, REGISTERED TONNAGE AND NUMBER OF MEN CARRIED ARRIVING  
AT THE PORTS OF THE SYDNEYS, DURING 1910, FROM 1ST JANUARY,  
UNTIL 31ST DECEMBER.

This includes all British and foreign steamers from foreign ports, all British  
and foreign steamers engaged in the coal and coastwise trades, and sailing vessels  
of all descriptions, including Canadian, and all foreign vessels, total vessels 2,200  
having a tonnage of 1,437,014, carrying crews of 68,965 men.

	No.	Tonnage.
Ocean steamers. . . . .	1,027	1,311,480
Coastwise steamers. . . . .	205	51,769
Barks. . . . .	2	1,464
Barkentines. . . . .	8	1,662
Brigantines. . . . .	11	1,216
Schooners. . . . .	933	57,846
Steam trawlers. . . . . (making 74 calls at this port).	13	9,724
Ships. . . . .	1	1,853
	2,200	1,437,014

WM. HACKETT,  
*Secretary.*



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HARBOUR COMMISSIONERS' STATEMENT OF RECEIPTS AND EXPENDITURES  
FOR THE YEAR ENDING DECEMBER 31, 1910.

1910.	Receipts.	\$ cts.	1910.	Expenditure.	\$ cts.
Jan. 1..	Amount on hand. . . . .	1,848 36	Jan. 8..	James Purves, Surveyor	20 00
April 30..	Received harbour dues. .	493 20	" 27..	B. R. Rice. . . . .	1 00
May 31..	" " . . . . .	536 44	" 27..	A.C.Thompson Co., Ltd.	7 38
June 30..	" " . . . . .	670 22	" 29..	Labor on breakwater. . .	9 88
July 31..	" " . . . . .	470 50	April 16..	Louis Way. . . . .	5 56
Aug. 31	" " . . . . .	669 05	May 13..	George Brown. . . . .	12 00
Sept. 30..	" " . . . . .	428 52	" 13..	Bent & Cohoon. . . . .	5 37
Oct. 31..	" " . . . . .	633 93	" 23..	George Brown. . . . .	2 10
Nov. 30..	" " . . . . .	562 55	" 23..	Bent & Cohoon. . . . .	55
Dec. 31..	" " . . . . .	251 58	July 28..	Duncan Gouthro, repair- ing pile driver. . . . .	9 00
			Aug. 6..	Labor, ballast ground . .	18 00
			" 15..	Labor, ballast ground .	18 00
			" 24..	Sidney Salter, lumber .	7 58
			Nov. 5..	Labor. breakwater. . . . .	38 40
			" 16..	E. Burke, ballast . . . . .	5 00
			" 16..	Sidney Salter, lumber . .	1 85
			" 19..	Labor, breakwater. . . . .	36 75
			" 24..	Bent & Cohoon. . . . .	5 55
			Dec. 29..	Schr. <i>Dorothy Duff</i> . . . .	6 00
			" 31..	J. McPherson. . . . .	235 80
				N. S. Building Society.	326 70
				William Hackett. . . . .	650 00
				P. J. McDonald. . . . .	550 00
				M. W. Lawlor. . . . .	550 00
				Joseph Shean. . . . .	700 00
				Rent. . . . .	75 00
				Amount on hand. . . . .	3,266 88
		6,564 35			6,564 35
	Amount on hand. . . . .	3,266 88			

PETER J. McDONALD,  
M. W. LAWLOR,  
WM. HACKETT,  
*Harbour Commissioners.*

NORTH SIDNEY, C.B.,  
February 1st, 1911.



APPENDIX No. 6.

REPORT OF THE PICTOU, N.S., HARBOUR COMMISSIONERS FOR THE  
CALENDAR YEAR ENDED DECEMBER 31, 1910.

PICTOU, N.S., JANUARY 12th, 1911.

MR. ALEX. JOHNSTON,  
Deputy Minister, Marine and Fisheries,  
Ottawa.

SIR,—I enclose herewith the Secretary's account and copy of statement of  
Collector, which I trust you will find in order.

Yours respectfully,

HENRY G. IVES,  
*Secretary, Harbour Commission.*

PICTOU, DEC. 31st, 1910.

PICTOU HARBOUR COMMISSIONERS in account with Henry G. Ives, Secretary.

	CR.	\$	cts.	\$	cts.
Jan. 1	By Balance in Bank of Nova Scotia. . . . .	832	73		
Dec. 31	Dues collected in 1910. . . . .	342	87		
				1,175	60
	DR.				
April 11	To S.S. <i>Hiawatha</i> placing buoys. . . . .	30	00		
" 16..	J. T. MacKay, repairing buoy. . . . .	5	85		
" 20..	Painting buoys. . . . .	5	00		
" 26..	Bushing channel to East River. . . . .	12	00		
May 7	S.S. <i>Hiawatha</i> placing buoy. . . . .	5	00		
June 8..	Thos. Fraser, bushing West River. . . . .	8	00		
" 17..	Boat hire for commissioners. . . . .	5	00		
July 5	Secretary's salary. . . . .	100	00		
" 18..	Joe. Graham. . . . .	25	00		
Nov. 29..	S.S. <i>Hiawatha</i> , taking in buoys. . . . .	30	00		
Dec. 1	Balance bushing channel East River. . . . .	6	00		
" 1..	Rod. Graham, bushing East River. . . . .	34	00		
" 31.	Balance in Bank of Nova Scotia. . . . .	909	75		
				1,175	60
1911.					
Jan. 1..	By balance in Bank of Nova Scotia. . . . .	909	75		

HENRY G. IVES,  
*Secretary.*

J. R. BROWN,  
W. A. McINTOSH,  
J. C. REID,  
D. A. BARRY,

} *Commissioners.*



SESSIONAL PAPER No. 23

CUSTOMS HOUSE,  
PICTOU, N.S., JANUARY 10th, 1911.

Statement of Harbour dues account for the year 1910

RECEIPTS.	\$	cts.	\$	cts.
Balance on hand 31st December, 1909.....	125	00		
Total collections for year ending 31 December, 1910. ....	642	87		
			767	87
DISBURSEMENTS.				
Paid salary of Harbour Master for year 1910. ....	300	00		
December 31, 1910, placed to credit of Harbour Commissioners. ....	342	87		
December 31, 1910, cash balance on hand. ....	125	00		
			767	87

R. P. FRASER,  
*Collector of Customs.*

December 31st, 1910.



## APPENDIX No. 7.

REPORT OF BELLEVILLE, ONT., HARBOUR COMMISSIONERS FOR  
THE YEAR ENDING DECEMBER 31, 1910.

BELLEVILLE, ONT., JANUARY 6th, 1911.

The Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—Enclosed please find statement of the Harbour Commissioners for the year ending December 31st, 1910. The report of the Harbour Master was mailed you December 8th last.

We are looking well after the sinking fund for the paying of the Debentures when due, our statement shows \$2,803.84 to its credit as per Bank book.

I remain, dear sir,  
Very truly yours.

DAVID PRICE,  
*Chairman, Harbour Commissioners.*

		Receipts.	Expenditure.
		\$ cts.	\$ cts.
1910.	To balance in bank, Dec. 31st, 1909. . . . .	388 63	
Feb. 8..	Cash for stone. . . . .	8 00	
May 13..	Harbour dues. . . . .	305 30	
" 31..	Interest from bank. . . . .	4 75	
June 22..	Harbour dues. . . . .	360 70	
July 12..	" " . . . . .	242 67	
Aug. 11..	" " . . . . .	232 67	
Sept. 13..	" " . . . . .	191 65	
Oct. 6..	" " . . . . .	204 29	
Nov. 8..	" " . . . . .	187 05	
Dec. 3..	" " . . . . .	148 55	
Dec. 31..	Interest from bank. . . . .	8 47	
		2,282 73	
Feb. 9	By rebate. . . . .		4 95
May 13..	By paid J. Roblin, buoys and postage. . . . .		6 70
June 22	Printing. . . . .		2 00
Aug. 5 & 11,	Filling back of Rro. wall. . . . .		300 00
" 11..	Buoys and postage. . . . .		2 25
" 13	Filling back of wall. . . . .		100 00
Sept. 13..	Printing. . . . .		1 75
Feb. 1.	Coupon interests, bank of Commerce. . . . .		550 00
" 3	Coupon interests, Bank of Commerce. . . . .		50 00
Nov. 8..	Coal. . . . .		1 90
" 9	Deposited in Sinking Fund. . . . .		550 00
" 9	City of Belleville. . . . .		3 00
Dec. 3.	J. Roblin . . . . .		5 00
" 3..	Coal and rebates. . . . .		4 35
" 3.	Salary for year. . . . .		650 00
			2,231 90
Dec. 31..	Balance in bank as per book. . . . .		50 83
		2,282 73	2,282 73

The above is a correct statement, to the best of our belief, of all monies received and expended by the Belleville Harbour Board for the year 1910.

DAVID PRICE,  
*Chairman.*

F. S. CARMAN.



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STATEMENT of Sinking Fund to Dec. 31st, 1910, Belleville Harbour Commissioners.

To credit of Sinking Fund at Canadian Bank of Commerce. to Dec. 31st, 1909, as per former statement. ....	\$2,186 84
May 31st, 1910, interest. ....	32 69
Nov. 9th. deposited. ....	550 00
Nov. 30th, 1910, interest. ....	34 31
	<hr/>
Amount in bank as per bank book. ....	\$2,803 84

Above is a correct statement of monies in Sinking Fund to Dec. 31st, 1910.

DAVID PRICE,  
*Chairman.*

F. S. CARMAN.

HARBOUR MASTER'S OFFICE,  
BELLEVILLE, ONT., DEC. 7, 1910.

To the Honourable Minister,  
Marine and Fisheries,  
Ottawa.

SIR,—The undersigned Harbour Master of the City of Belleville, begs to submit the following report for the year 1910.

Navigation opened April 1st, and closed Dec. 4th in Belleville Harbour.

IMPORTS—

14,589 tons of coal. ....	\$1,458 90
1,125 tons merchandise. ....	112 50
20,000 lath. ....	50
164,000 feet of lumber. ....	8 20
51 cords of wood. ....	2 55
70 bbls of oil. ....	2 10
2½ tons of hay. ....	25
	<hr/>
	\$1,585 00

EXPORTS—

13,000 shingles. ....	\$ 39
1,121 tons of merchandise. ....	112 10
1,754 tons of cheese. ....	175 40
	<hr/>
	\$287 89

---

\$1,872 89

Disbursements. .... 23 95

Deposited in bank. .... \$1,848 94

Cash from stone. .... \$8 00

Rebate L. & C. .... 4 96

This balance deposited. .... \$3 04

---

\$1,851 98



1-2 GEORGE V., A. 1911

HARBOUR MASTER'S OFFICE,  
BELLEVILLE, ONT.

Short on coal by boat 947 tons, gained on cheese which helped to pull up the average.

All of which is respectfully submitted,

I have the honour to be, Sir,  
Your obedient servant,

SYD. VANDERVOORT,  
*Harbour Master.*

Sworn before me at Belleville this 8th day of December, 1910.

E. J. BUTLER,  
*A Commissioner for taking affidavits.*

DAVID PRICE,  
*Chairman, Harbour Commissioners*



SESSIONAL PAPER No. 23

## APPENDIX No. 8.

REPORT OF THE PILOTAGE AUTHORITY OF BUCTOUCHE, N.B., FOR  
THE YEAR ENDING 31st DECEMBER, 1910.

Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report of the Pilotage Authority of Buctouche, N.B., for the year ending 31st December, 1910.

Names and ages of licensed pilots:—

Joseph Crossman, age 59 years.

Joseph Bellisle, age 54 years.

John Mooney, age 36 years.

Frank R. Smith, age 36 years.

Peter A. Smith, age 44 years.

Joseph Duplessis, age 51 years.

The above named pilots are licensed to undertake the pilotage of every description, within and throughout the pilotage district of Buctouche.

Pilotage fees are charged as per section 12 of Rules and Regulations for the district, viz.: \$1.50 per foot draught of water both inward and outward.

Total amount of pilotage collected during the year, \$163.50, of which 1 Russian sailing vessel paid \$33.75; 3 British steam, coal barges paid \$99.75; 5 British schooners paid \$30.00.

The pilotage was paid to the pilots who earned the same.

No new licenses were issued and no expenses incurred during the year.

JOHN C. ROSS,  
*Secretary.*

Buctouche, N.B.,  
January 3rd, 1911.



APPENDIX No. 9.

REPORT OF THE PILOTAGE AUTHORITY OF CARAQUET, N.B., FOR  
YEAR ENDING 31st DECEMBER, 1910.

Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—Enclosed please find report of Caraquet, N.B., Pilotage Authority,  
for the year ending 31st December, 1910.

C. HUBBARD, SECRETARY, IN ACCOUNT WITH THE PILOTAGE AUTHORITIES OF  
CARAQUET, N.B.

By renewal of license to Charles Vibert, 1909-10. ....	\$2 00
“ “ “ Alex. J. Wilson, 1910.. ....	1 00
“ “ “ Lazaur Gauven, 1910.....	1 00
“ “ “ Jos. X. Chiasson, 1910. ....	1 00
“ “ “ Ed. E. Le Boutillier, 1910. ....	1 00
“ “ “ Jas. X. Lanteigne, 1910.....	1 00
Salary for 1910. ....	\$7 00

STATEMENT OF PILOTAGE DUES PAID IN THE PILOTAGE DISTRICT OF CARAQUET,  
N.B., FOR THE YEAR ENDING 31st DECEMBER, 1910.

Name of Vessel.	Nationality.	Name of Pilot.	Tonnage.	Amount.
				\$ cts.
Koral. ....	Russian.	Chas. Vibert. .	273	26 80
Cyrus. ....	“	“ “	258	24 20
Success. .	British	James Lanteigne.....	199	24 00
Pilgrim. .	“	None . . . . .		
Success. .	“	Lazaur Gauven. .	199	24 00
Rosenheim. ....	“	Lazaur Gauven } C. Vibert, out. }	135	21 00
Clara Hamilton. ....	“	Alex. J. Wilson. . .	97	20 00
Koral. .	Russian.	Ed. E. LeBoutellier. ....	274	26 80
Weawaltic.....	British.....	James Lanteigne . . . . .	174	24 00
S.S. Beatrice.....	“	Joseph H. Chiasson.	353	27 00
Glenwood.	“	J. Lanteigne. . .	97	24 00
Cardina. . . .	“	“	99	20 00
Mayola. ....	“	“	119	27 00
				\$228 80

I am, Sir,  
Your obedient servant,

C. HUBBARD.



SESSIONAL PAPER No. 23

## APPENDIX No. 10.

REPORT OF THE PILOTAGE AUTHORITY OF HALIFAX FOR THE  
YEAR ENDED DECEMBER 31, 1910.

HALIFAX, N.S., JANUARY 5th, 1911.

The Deputy Minister of Marine and Fisheries,  
Ottawa.SIR,—I beg to enclose accounts of the Halifax Pilot Commission for the year  
ending 31st December, 1910, as follows:—

Receipts and expenditures.  
 Superannuation fund.  
 List of pilots.  
 List of pensioners.  
 Return of vessels inward and outward.

I am, sir,  
 Your obedient servant,

FRANK J. PHELAN,  
*Secretary.*

## RECEIPTS AND EXPENDITURES.

1911.		\$	cts.	\$	cts.
Jany. 1.	Balance. . . . .			4,590	50
Dec. 31.	Interest. . . . .	1,141	31		
	Commission. . . . .	2,272	97		
	Outward pilotage. . . . .	1,299	30		
				4,713	58
				9,304	08
	Salary. . . . .	974	97		
	Rent. . . . .	425	00		
	Telephone. . . . .	45	00		
	Books and stationery. . . . .	12	15		
	Superannuation. . . . .	2,350	68		
	Office expense. . . . .	220	52		
	Auditor. . . . .	50	00		
	Balance. . . . .	5,225	76		
				9,394	08

## SUPERANNUATION FUND.

1911.		\$	cts.
Jany. 1.	Balance. . . . .	32,288	33
	Interest and commission. . . . .	2,214	68
	Licenses. . . . .	96	00
	Inspection. . . . .	40	00
		34,639	01
	Paid pensions. . . . .	1,599	00
		33,040	01



1-2 GEORGE V., A. 1911

LIST OF PILOTS—HALIFAX DISTRICT.

Name.		Age.	Address.
2	Jas. Renner. . .	26	Halifax. N.S.
3	Lamont Power. . . . .	23	Portugese Cove.
5	Lawrence Hayes. . . . .	32	Halifax.
6	Frank Thomas. . . . .	34	Herring Cove.
7	Bernard Brackett. . . . .	29	"
8	William Hayes. . . . .	36	"
9	Wallace Brackett. . . .	25	"
10	John Holland. . . . .	29	Dartmouth.
11	Edward Renner. . . . .	24	Halifax.
12	James Hanrahan. . . . .	73	Ferguson's Cove.
14	John Hayes. . . . .	60	Halifax.
15	James Spears. . . . .	54	"
16	John Beazley. . . . .	51	"
17	William Gorman. . . .	38	"
18	Charles Martin. . . . .	44	"
19	William White. . . . .	53	Purcell's Cove.
20	Thomas Hayes. . . . .	51	Halifax.
21	Thomas Reyno. . . . .	50	"
22	Frank Mackay. . . . .	38	"
23	Henry Latter. . . . .	42	"

OUTPORTS.

Name.		Age.	Address.
	Joseph Smith. . . . .	68	Margaret's Bay.
	D. Palmer. . . . .	62	Ship Harbour.
	R. Martin. . . . .		Sheet Harbour.
	Geof. Gilbert. . . . .	59	Musquodoboit.
	M. G. Marks. . . . .	53	Ship Harbour.
	William Berrigan. . . . .	65	Salmon River.
	William Smith. . . . .	47	Necum Teuch.

LIST OF PENSIONERS.

Name.		Address.	Amount.
			\$ cts.
Wm. Baker. .	Halifax. . . . .		300 00
Jas. Fleming. .	"		300 00
Wm. Beazley. . . . .	"		200 00
J. W. Flemming. . . . .	"		200 00
Jas. Holland. . .	Portuguese Cove.		200 00
Mrs. C. Martin. . . . .	Halifax . . . . .		75 00
Mrs. J. Johnson.	Bear Cove.		75 00
Mrs. C. Glazebrook. . . . .	Boston. . . . .		75 00
Mrs. D. Martin. . .	Halifax . .		75 00
W. L. Gallagher. . . . .	"		50 00
Cath. Gallagher.	"		50 00
Mrs. H. Munro. . . .	"		75 00
Mrs. J. Reyno.	Herring . .		75 00
Mrs. J. Holland. .	Halifax. . . .		75 00
Mrs. E. Bayers. . .	"		150 00
			1,975 00



## SESSIONAL PAPER No. 23

RETURN of vessels inward at Port of Halifax, N.S., from January 1st, to 31st  
December, 1910, subject to pilotage.

## BRITISH.

Schooners.	Barques.	Steamers.	Tonnage.	Amount.
122	7	739	14,989.54	\$20,769 40

## FOREIGN.

Schooners.	Barques.	Steamers.	Tonnage.	Amount.
47	5	97	1,292.98	1,763 20

RETURN of vessels outward at Port of Halifax, N.S., from January 1st, to 31st  
December, 1910, subject to pilotage.

## BRITISH.

Schooners.	Barques.	Steamers.	Tonnage.	Amount.
25	7	676	14,770.65	\$11,006 89

## FOREIGN.

Schooners.	Barques.	Steamers.	Tonnage.	Amount.
2	4	63	1,115.14	\$1,243 73

## PILOTAGE DUES.

				Inward.	Outward
				\$ cts.	\$ cts.
Canadian Vessels of 120 tons and under.				Free.	Free.
"	120	"	200 tons. . .	9 60	6 00
"	200	"	300 tons. . . . .	13 20	8 40
"	300	"	400 tons. . .	16 80	10 80
"	400	"	500 tons. . .	19 20	12 00
"	500	"	600 tons. . .	21 60	13 20



1-2 GEORGE V., A. 1911

Vessels of 600 tons and over, sixty cents for every 100 tons additional, or fractional part thereof inwards, and thirty cents outwards.

Outwards pilotage for all vessels of 200 tons and upwards compulsory.

FRANK J. PHELAN,  
*Sec. and Treas.*

BY-LAW NO. 41.

The rates for moving vessels in the harbour of Halifax, N.S., by a pilot licensed for the Halifax Pilotage District, when a pilot is employed for the purpose, shall be as follows:—

All vessels under 2,000 tons. . . . .	\$5 00
All vessels over 2,000 tons . . . . .	10 00

*To Bedford Basin and Lawlor's Island:*

All vessels under 1,000 tons. . . . .	\$10 00
All vessels over 1,000 tons. . . . .	20 00

Vessels stopping at quarantine are not subject to charge for moving unless the detention exceeds twelve hours.



SESSIONAL PAPER No. 23

## APPENDIX No. 11.

REPORT OF THE PILOTAGE AUTHORITY OF LOUISBURG, N.S., FOR  
THE YEAR ENDING DECEMBER 31, 1910.

LOUISBURG, N.S., JANUARY 11th, 1911.

Deputy Minister of Marine and Fisheries,  
Ottawa.SIR,—I have the honour to submit my annual report of the Pilotage Authority  
of Louisburg, N.S., for the year ending December 31st, 1910.

Ships employing a pilot.	Tonnage.	Amount paid.
		\$ cts.
53 British steamships. ....	62,857	1,410 00
56 Foreign steamships. ...	122,804	1,971 86
13 British sailships. . .	1,642	67 80
1 Foreign sailship. ....	132	12 00
		<hr/> 3,641 66
Taking orders to ships		50 00
Docking ships.		30 00
		<hr/> 3,541 66
To commission and stationery. ....	\$141 63	
" Other bills to maintain service. . .	456 51	
" Paid pilots each \$367.94. ....	2,943 52	
		<hr/> 3,541 66

THOS. TOWNSEND,  
*Secretary to Pilot Board.*

LOUISBURG, N.S., DEC. 31st, 1910.

## NUMBER of pilots licensed for the port of Louisburg.

No.	Name.	Age.	No.	Name.	Age.
1	Pope, Pierce. ....	36	5	Townsend, William H. ....	64
2	Wilcox, Thomas. . . . .	46	6	Williams, William. . . . .	40
3	Power, John. . . . .	48	7	Tutty, Lewis. . . . .	40
4	Tutty, John E. ....	51	8	Kelly, John. . . . .	48

Number of boats ready for use, 8.



RATES of pilotage for port of Louisburg.

Rates of pilotage for port of Louisburg.					Inward.	Outward.
					\$ cts.	\$ cts.
On sail and steamship of	80 tons to	120			4 00	3 00
" "	120 "	200			6 00	4 00
" "	200 "	300			7 00	5 00
" "	300 "	400			8 00	6 00
" "	400 "	500			10 00	8 00
" "	500 "	700			11 00	9 00
" "	700 "	1,000			13 00	11 00
" "	1,000 "	1,500			15 00	12 00
" "	1,500 "	2,000			16 00	14 00
" "	2,000 "	2,500			18 00	16 00
" "	2,500 "	3,000			22 00	18 00

Over 3,000 tons, one cent additional per ton inward and one cent per ton additional, outward. Winter pilotage 20% additional on above rates. Winter pilotage after Nov. 30th, up to and including April 30th.



SESSIONAL PAPER No. 23

## APPENDIX No. 12.

REPORT OF THE PILOTAGE SUPERINTENDENT OF MONTREAL, P.Q.,  
FOR THE YEAR ENDING DECEMBER 31, 1910.THE PILOTAGE OFFICE AT MONTREAL,  
DECEMBER 20TH, 1910To the Général Superintendent of Pilotage  
for Canada.

## REPORT OF MONTREAL PILOTAGE FOR THE YEAR ENDING THE 31st DECEMBER, 1910.

SIR,—I have the honour to report on the working of the Montreal Pilotage for the year 1910.

The offices in Montreal are situated on the water front, at No. 223 Commissioners street; Captain James J. Riley is the superintendent; Mr. J. Omer Michaud is the Assistant; Mr. Louis Pinoteau is the messenger, and Mr. J. A. Rolland is the night guardian.

The offices in Montreal are open during the whole of the year, but the night guardian is employed and paid only for the season of navigation.

The offices in Quebec are on Dalhousie street, opposite the office of the Quebec Pilots, and the boatmen's landing. Mr. Ulric Thibaudeau has charge of the Quebec office and is assisted by Mr. Prudent Beaudet, who acts as night guardian.

The Quebec office is open only during the season of navigation; the night guardian goes off duty and pay at the close of navigation.

At the close of last year, the number of pilots on the active service list was 50, and that number has been kept during the present year.

*Appendix No. 1*—shows the names of the branch pilots, their age, place of residence, date of branch, remarks, number of trips to and from Montreal, number of trips to and from intermediate ports, total number of trips, earnings to Montreal earnings to intermediate ports, total earnings, how employed, whether on special service or on Tour-de-Rôle.

The total amount earned by the branch pilots during this year was \$81,868.83, but this does not include the amount of money earned by the pilots for moving vessels in the harbour.

The largest amount earned during the season 1910 by any one branch pilot, was \$2,452.97, and the smallest was \$410.08; but this small amount was earned by a pilot who only received his branch on the second day of August, 1910. The smallest amount earned by a pilot who worked during the entire season, was \$701.71 exclusive of money earned by moving vessels in the harbour.

The number of branch pilots assigned to special service was 39. The number of men on Tour-de-Rôle was 11.

The amount earned by the 39 special service men was \$73,232.37 and by the 11 Tour-de-Rôle men, \$8,636.46, an average of \$1,877.75 for each special service pilot,



and \$785.13 for each Tour-de-Rôle pilot, exclusive of money earned by moving vessels in the harbour; but including the money earned by the Tour-de-Rôle men for movages, their average is \$1,047.86.

No account is taken of the money earned by the special service pilots for movages, but it may be said to be \$300.00 downwards.

*Appendix No. 2* shows the earnings of the Tour-de-Rôle pilots for the years 1909 and 1910.

The behaviour of the pilots has been good; no complaints have been made of bad conduct or inefficiency.

*Appendix No. 3* shows the names of the selected apprentices and a summary of the work done by them.

*Appendix No. 4* shows full list of apprentice pilots at the beginning of this season, with their ages, place of residence, and date of license. The names with a star before them are those of the seven selected apprentices.

The behaviour of these young men has been generally good.

*Appendix No. 5* shows the names of the persons who are receiving pensions from the pilots' superannuation fund, and the amount received by each, every three months.

The pilots' superannuation fund is in the custody and under the control of the Finance Department in Ottawa. This office remits to the Finance Department,

The pilots' superannuation fund is in the custody and under the control of the Finance Department in Ottawa. This office remits to the Finance Department all moneys received for account of the fund and sends receipts for all moneys received from the fund.

During the past year, six of the superannuated pilots have been removed by death. as follows:—

Alfred Frenette, died February 19th, 1910.

Pierre Gagnon, died April 20th, 1910.

C. Lyderic Bouillé, died April 23rd, 1910.

Joseph G. Dussault, died June 12th, 1910.

Célestin Brunette, died Sept. 21st. 1910.

L. A. Bouillé, died Sept., 24th, 1910.

*Appendix No. 6* shows the number and sort of vessels reported to this office during the years 1909 and 1910, also gives the tonnage, total number of crews and the number of inward passengers.

*Appendix No. 7* shows the changes that have taken place in the list of pilots from the time that the Department took over the governance of the pilotage, up to the present time.

*Appendix No. 8* shows the tariff of rates for pilotage in this district.

During the months of January and February of this year, a board was convened for the examination of apprentice pilots.

Apprentice pilot Joseph Mayrand was passed without reserve. Apprentice pilot F. X. Rivard was passed, but subject to the condition that he make not less than 50 trips on large vessels with branch pilots before getting his "Branch," the said trips to be made during each month of the season. Jules Brière, Napoleon deVillers and Achille Gosselin failed in knowledge of the river and were put back until the next examination. Mr. Rivard has completed the 50 trips required of him.



## SESSIONAL PAPER No. 23

The general annual meeting of the Montreal pilots' association was held at Deschambault, on the 12th and 13th instant, and the following were elected as members of the committee.

JOSEPH HURTEAU, President.

B. ARCAND,

O. FRENETTE,

C. GAUTHIER,

ALBÉRIC ANGERS, Secretary-Treasurer.

All respectfully submitted by

Your obedient servant,

JAMES J. RILEY,

*Superintendents of Pilots.*



APPENDIX No. 1.—BRANCH PILOTS

STATEMENT showing the number of branch pilots for and above the harbour of  
and whether employed on

No.	Name of Pilot.	Age.	Residence.	Date of Branch	Remarks.
1	Naud, Onésime. ....	69	Deschambault, P.Q. ....	Mar. 16, '70	
	Brunet, Célestin. ....	67	42 Cuvilliers st., Montreal. ....	Feb. 28, '72	
2	Auger, Cléophas. ....	65	Pointe Lévis, P.Q. ....	Sep. 22, '74	
3	Labranche, Ferdinand. ...	63	Portneuf, P.Q. ....	Apl. 8, '75	
4	Bouillé, Louis Z. ....	61	Deschambault, Q.P. .	Jan. 16, '78	
5	Gauthier, Laurent. ....	59	Deschambault, P.Q. .	Dec. 10, '79	
6	Nault, Delavoie. ....	56	Deschambault, P.Q. ....	Dec. 10, '79	
7	Gauthier, Wilbrod. ....	58	Deschambault, P.Q. ....	Dec. 10, '79	President, Committee
8	Arcand, Norbert. .	57	Champlain, P.Q. .	Dec. 10, '80	
9	Bouillé, Tancrede. ....	57	Deschambault, P.Q. ....	Dec. 11, '80	
10	Raymond, Wilfrid. .	56	Deschambault, P.Q. ....	Apl. 20, '88	
11	Hurteau, Joseph P.	49	164 Park Lafontaine, Montreal.	Mar. 20, '89	
12	Perreault, Edouard. .	61	Deschambault, P.Q. .	Mar. 20, '89	
13	Dussault, Honoré. .	57	Ste. Pétronille, P.Q. . . .	July 16, '89	
14	Brière, Arthur. ....	54	Portneuf, P.Q. ....	Apl. 28, '91	
15	Perreault, Alexis. ....	48	284 Dufresne, Montreal	Apl. 28, '91	
16	Dufresne, Côme. .	50	Deschambault, P.Q. .	June 28, '91	
17	Naud, Aubert. ....	57	Deschambault, P.Q. .	July 11, '93	
18	Dussault, Napoléon.	49	Deschambault, P.Q. ....	Apl. 3, '94	
19	Arcand, Barthélémi. ....	49	Deschambault, P.Q. .	Apl. 3, '94	Member of Committee
20	Belisle, Prudent. ....	48	Deschambault, P.Q. .	Apl. 3, '94	
21	Arcand, Georges. ....	46	Deschambault, P.Q. .	Apl. 3, '94	
22	Toupin, Constant.	44	Three Rivers, P.Q.	Apl. 3, '94	
23	Perreault, Georges. ....	45	Deschambault, P.Q. .	Sep. 11, '94	
24	Bouillé, Narcisse. .	51	Deschambault, P.Q. .	Oct. 9, '94	
25	Léveillé, Joseph	47	Batiscan, P.Q.	June 18, '95	
26	Perron, Séverre. .	52	115 Chr. Colomb St., Montreal. .	Apl. 14, '96	
27	Angers, Albéric. .	36	Ste. Anne de la Pérade, P.Q. ....	Mar. 14, '98	Secretary, Committee
28	Bélisle, Arthur. .	48	Deschambault, P.Q. .	Sep. 20, '98	
29	Hamelin, G. T. ....	37	Grondines, P.Q. ....	Sep. 20, '98	
30	Perreault, Anthyme. ....	42	Deschambault, P.Q. ....	May, 1, 1900	
31	Raymond, J. N. ....	41	Deschambault, P.Q. .	Oct. 4, 1900	
32	Bourassa, J. Henri. ....	33	Bienville, Lévis, P.Q. . .	Apl. 16, '01	
33	Paquin, E. Azarias. ....	38	18 du Pont St. Québec. . .	June 13, '02	
34	Labranche, J. Melville	36	Portneuf, P.Q. ....	June 13, '02	
35	Paquet, Dandien	37	Grondines, P.Q. . .	Feb. 4, '03	
36	Gariépy, J. Arthur. ....	32	47 Notre-Dame St., Viauville, Montreal. .	Apl. 20, '03	
37	Gagnon, Albert. ....	36	Three Rivers, P.Q. ....	Nov. 30, '03	
38	Frenette, J. Oswald. .	35	Portneuf, P.Q.	Mar. 26, '06	Member of Committee
39	Hamelin, Chs. B.	30	Champlain, P.Q. ....	June 8, '06	Member of Committee
40	Perron, Tancrede. ....	33	38 Orléans St., Maisonneuve, Montreal. .	Dec. 1, '06	
41	Frenette, J. Delavoie	33	Portneuf, P.Q. ....	Apl. 1, '07	
42	Hamelin, Fortunât. .	33	St. Romuald, P.Q. ....	Apl. 20, '07	
43	Gauthier, J. Cyriae. .	30	1235 Sanguinet, Montreal.	July 3, '07	
44	Angers, J. B. ....	30	Ste. Anne de la Pérade, P.Q.	July 7, '08	
45	Perreault, David J.	30	Ste. Anne de la Pérade, P.Q. ....	Jan. 15, '09	
46	Laehance, Napoléon.	27	442 King St., Québec. .	June 4, '09	
47	Bouillé, Henri. ....	26	Deschambault, P.Q. ....	June 30, '09	
48	Perron, Théode .	27	Sorel, P.Q. . .	Aug 1, '09	
49	Dussault, Bona. ....	29	St. Marc des Carrières, Que. ....	May 2, '10	
50	Arcand, J. Arthur. .	28	Champlain, P.Q. ....	Aug. 2, '10	

Mr. Brunet was pensioned on the 2nd of August, 1910, and replaced by J. Arthur Arcand, branched on the

MONTREAL PILOTAGE OFFICE,  
MONTREAL, DECEMBER 20th, 1910.



## SESSIONAL PAPER No. 23

## FOR AND ABOVE THE HARBOUR OF QUEBEC.

Quebec, during the year 1910, their age, residence, number of pilotage, earnings, special service or tour-de-rôle.

Number of trips to Montreal.		Number of trips to intermediate ports.		Total No. of trips.	Earnings to Montreal.	Earnings to intermediate ports.	Total earnings.	Employed on special service or tour-de-Rôle.
In.	Out.	In.	Out.		\$ cts.	\$ cts.	\$ cts.	
18	11			29	890 71		890 71	Tour-de-Rôle.
2	3			5	138 35		138 35	Keystone Transportation Co.
16	14			30	1,754 70		1,754 70	Donaldson, Thomson & Cairn Line.
18	17			35	2,118 70		2,118 70	C.P.R. Atlantic Line.
16	18			34	2,045 96		2,045 96	C.P.R. Atlantic Line.
23	14			37	2,303 94		2,303 94	Allan Line.
23	24	1	2	50	2,261 66	98 63	2,360 29	Dominion Coal Co.
20	16			36	2,302 48		2,302 48	Allan Line.
19	19	6	5	49	1,971 07	327 45	2,298 52	Dominion Coal Co.
25	11			36	2,174 70		2,174 70	Allan Line.
17	17			34	1,887 59		1,887 59	Thomson & Cairn Lines.
24	25		2	51	2,387 97	75 00	2,462 97	Dominion Coal Co.
14	14			28	1,481 20		1,481 20	Manchester Line.
15	10	1	1	27	851 88	68 00	919 88	Tour-de-Rôle.
14	14	2	3	33	1,354 84	191 92	1,546 76	Head Line
14	14			28	1,693 85		1,693 85	Canadian Northern S.S. Co.
17	15			32	1,939 52		1,939 52	White Star Dominion Line.
17	15			32	1,730 13		1,730 13	Allan Line.
17	17			34	1,945 10		1,945 10	Thomson & Cairn Lines.
13	13	1	1	28	952 71	51 48	1,004 19	Intercolonial Coal Mining Co.
22	22	3	2	49	2,233 61	148 26	2,381 87	Dominion Coal Co.
14	5	3	2	24	587 82	113 89	701 71	Tour-de-Rôle.
11	9			20	719 85		719 85	Tour-de-Rôle.
13	19	5		37	1,840 94	179 03	2,019 97	Dominion Line.
15	15			30	1,554 73		1,554 73	Manchester Line.
18	18		1	37	2,050 99	28 88	2,079 87	Thomson & Cairn Lines.
22	23	2	3	50	2,176 03	183 57	2,359 60	Dominion Coal Co.
18	14			32	2,034 05		2,034 05	White Star Dominion Line.
14	7	1	3	25	712 96	105 96	818 92	Tour-de-Rôle.
22	22	3	1	48	2,127 33	118 86	2,246 19	Dominion Coal Co.
12	19	1	2	34	669 34	83 69	753 03	Tour-de-Rôle.
10	22	1	2	35	848 94	35 38	884 32	Tour-de-Rôle.
22	22	2	2	48	2,231 57	140 88	2,372 45	Dominion Coal Co.
18	18	7	7	50	1,722 38	400 44	2,122 82	Nova Scotia Steel & Coal Co.
18	17			35	1,893 79		1,893 79	Canada Line.
15	9	1		25	726 97	40 25	767 22	Tour-de-Rôle.
24	24	1		49	2,308 22	32 18	2,340 40	Dominion Coal Co.
12	13			25	1,402 18		1,402 18	New Zealand C. P. R.
22	22	3	3	50	2,225 59	192 98	2,418 57	Atlantic Co.
15	18		1	34	1,458 97	35 88	1,494 85	Dominion Coal Co.
13	15			28	1,654 85		1,654 85	Elder Dempster Co.
								Donaldson, Thomson & Cairn Lines.
11	8	3	2	24	760 85	110 85	871 50	Tour-de-Rôle.
15	16			31	1,754 51		1,754 51	Allan Line.
18	16			34	2,088 86		2,088 86	C.P.R. Atlantic Line.
18	19			37	1,183 00		1,183 00	Atlantic Coast S.S. Co.
13	9	1		23	852 67	46 57	899 24	Tour-de-Rôle.
9	9	5	5	28	825 69	298 38	1,124 07	Nova Scotia Steel & Coal Co.
15	15			30	1,179 67		1,179 67	Quebec S.S. Co.
11	9	3	5	28	925 59	310 05	1,235 64	Direct & Crown Line.
18	17			35	1,101 48		1,101 48	Keystone Transportation Co.
7	4	1	2	14	330 39	79 69	410 08	Tour-de-Rôle.
					78,370 88	3,497 95	81,863 83	

2nd of August, 1910. (See No. 50, below).

JAMES J. RILEY,  
Superintendent of Pilots.



1-2 GEORGE V., A. 1911

## APPENDIX No. 2.—MONTREAL PILOTAGE OFFICE.

EARNINGS of each Tour-de-Rôle pilot for the years 1909 and 1910.

Name of Pilot.	Total Earn- ings in 1909	Pilotage Earn- ings in 1910	Add for Mov- ings in 1900. Approximately.	Total Earnings in 1910.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Naud, Onésime. . . . .	947 11	890 71	235 00	1,125 71
Dussault, Honoré. . . . .	703 53	919 88	.....	919 88
Arcand, Georges. . . . .	.....	701 71	165 00	866 71
Toupin, Constant. . . . .	499 36	719 85	220 00	939 85
Bélisle, Arthur. . . . .	773 83	818 92	240 00	1,058 92
Perreault, Anthyme. . . . .	956 59	753 03	650 00	1,403 03
Raymond, J. N. . . . .	1,207 94	884 32	815 00	1,699 32
Paquet, Damien. . . . .	834 07	767 22	155 00	922 22
Frenette, J. Delavoie. . . . .	.....	871 50	150 00	1,021 50
Perreault, David J. . . . .	.....	899 24	140 00	1,039 24
Arcand, J. Arthur. . . . .	.....	410 08	120 00	530 08
	5,922 43	8,636 46	2,890 00	11,526 46

JAMES J. RILEY,

*Superintendent of Pilots.*

MONTREAL, DECEMBER 20th, 1910.

## APPENDIX No. 3.—MONTREAL PILOTAGE OFFICE.

SELECTED apprentice pilots for and above the harbour of Quebec.

SUMMARY of the work of the selected apprentice pilots for and above the harbour of Quebec, showing the number of trips made with branch pilots on ocean steamers, during the year 1910.

	Bona Dussault, J. Arthur Arcand,	made “	1 trip, then branched, 13 trips, then “	May 2nd, 1910. August 2nd, 1910.
No. 1.	F. X. Rivard,	“	51 trips.	
No. 2.	Joseph Mayrand	“	51 “	
No. 3.	Jules Brière,	“	59 “	
No. 4.	Napoleon deVillers,	“	58 “	
No. 5.	Achille Gosselin,	“	55 “	
No. 6.	Armand Marchand,	“	55 “	
No. 7.	Donat Paquette,	“	29 “	Promoted to selected apprentice pilots' list on the 30th August, 1910.

JAMES J. RILEY,

*Superintendents of Pilots.*

MONTREAL, DECEMBER 20th, 1910.



## SESSIONAL PAPER No. 23

## APPENDIX NO. 4.—MONTREAL PILOTAGE OFFICE.

LIST of apprentice pilots for and above the harbour of Quebec, Que., with particulars regarding them, age, residence, and date of license.

Name of Apprentice.	Age.	Residence.	Date of License.
1 Dussault, Bona., branched. .	28	St. Marc des Carrières, P.Q.	Dec. 4, 1900
2 Arcand, J. Arthur, branched. .	27	Champlain, P.Q. . . . .	Dec. 4, 1900
*3 Rivard, F. X. .	30	Grondines, P.Q. . .	Aug. 16, 1899
*4 Mayrand, Joseph. . . . .	29	Lachevrotière, P.Q. .	Aug. 16, 1899
*5 Brière, Jules. . . . .	24	Portnuf, P.Q. . . . .	Dec. 30, 1903
*6 deVillers, Napoléon. . . . .	24	Lotbinière, P.Q. .	Dec. 30, 1903
*7 Gosselin, Achille. . . .	25	Deschambault, P.Q.	Dec. 30, 1903
*8 Marchand, Armand. .	24	Three Rivers, P.Q.	Dec. 30, 1903
*9 Paquet, Donat. . . . .	26	Grondines, P.Q. . . .	Dec. 30, 1903
10 Lacroix, Edmond. . . .	25	Contrecoeur, P.Q. .	Dec. 30, 1903
11 Houde, Thomas. .	24	St. Antoine de Tilly, P.Q. . . .	Dec. 30, 1903
12 Marchand, Cyprien. . . .	24	1563 St. André St., Montreal.	Dec. 30, 1903
13 Naud, Emilien. . . . .	24	Deschambault, P.Q. .	Dec. 30, 1903
14 Perrault, Jos. Origène. . .	24	284 Dufresne St., Montreal.	Nov. 1, 1906
15 Perron, Oscar.	23	Deschambault, P.Q. . . . .	May 15, 1907
16 deVillers, Jos. Edmond. .	23	St. Louis de Lotbinière, P.Q..	June 15, 1907
17 Beaudry, François. . . . .	20	Ste. Anne de la Pérade, P.Q	May 5, 1908
18 Léveillé, Horace. . . . .	19	Batiscan, P.Q.	May 5, 1908
19 André, Gauthier. . . . .	18	Deschambault, P.Q. . . . .	Sept. 17, 1908
20 deVillers, Arthur. . . . .	20	St. Louis de Lotbinière, P.Q	May 10, 1909
21 Lavigne, Gaston. . . . .	19	308 Drolet St., Montreal. . . .	May 12, 1909
22 deLachevrotière, Chs. Auguste. . .	20	Lotbinière, P.Q. .	Aug. 31, 1909
23 Hallé, Alphonse. . . . .	17	195 Queen St., Quebec. . . .	Oct. 14, 1909
24 Brunet, Octave. . . . .	18	42 Cuvilliers St., Montreal. .	Nov. 11, 1909

Those with a star before their names, are the selected apprentices.

JAMES J. RILEY,

*Supt. of Pilots.*

MONTREAL, DECEMBER 20th, 1910.



## APPENDIX No. 5.—MONTREAL PILOTAGE OFFICE.

LIST of pensioners of the Montreal decayed pilots' fund—amount payable each quarter.

	Name.	Amount Payable each Quarter	Address.
		\$ cts.	
1	Widow David L. Bouillé. . . . .	29 33	Deschambault, P.Q.
2	" Athanase Dufresne. . . . .	37 33	Deschambault, P.Q.
3	" Victor Gagnon. . . . .	37 33	Champlain, P.Q.
4	" Alexis Gauthier. . . . .	32 00	Deschambault, P.Q.
5	" Octave J. Hamelin. . . . .	37 33	Deschambault, P.Q.
6	" Adolphe Lisé. . . . .	37 33	369 Ste. Catherine, East, M't'l.
7	" David Mathieu. . . . .	32 00	77 Fabre St., Montreal.
8	" Edouard Naud. . . . .	32 00	189 Joliette St., Hochelaga, Montreal.
9	" Jean Nault. . . . .	32 00	Deschambault, P.Q.
10	" Elzéar Bellisle. . . . .	37 33	Deschambault, P.Q.
11	" Zéphirin Bouillé. . . . .	37 33	Deschambault, P.Q.
12	" Cyrille Bélisle. . . . .	29 33	624b Parc Lafontaine St., Montreal.
13	" Joseph Pleau. . . . .	37 33	Batiscan, P.Q.
14	" Nestor Arcand. . . . .	37 33	St. Casimir, P.Q.
15	Heirs Josaphat Sauvageau, c/o Gustave Picard, tutor	29 33	260 Workman St., Montreal.
16	Dd. pil. Jean Arcand. . . . .	75 00	654 Parc Lafontaine St., Montreal.
17	Widow L. A. Bouillé. . . . .	75 00	Deschambault, P.Q.
18	Dd. pil. Philippe Belanger. . . . .	75 00	Lotbinière, P.Q.
19	" Joseph Chandonnet. . . . .	75 00	Lévis, P.Q.
20	" Georges Dufresne. . . . .	75 00	Deschambault, P.Q.
21	" Louis Mayrand. . . . .	75 00	Ste. Anne de la Pérade, P.Q.
22	" Augustin Naud. . . . .	75 00	St. Marc des Carrières, P.Q.
23	" Liboire Perrault. . . . .	75 00	St. Marc des Carrières, P.Q.
24	" Frefflé Toupin. . . . .	75 00	Shawenegan Falls, P.Q.
25	Widow Alfred Frenette. . . . .	37 33	Portneuf, P.Q.
26	Dd. pil. Gédéon Groleau. . . . .	75 00	Grondines, P.Q.
27	" Alfred St. Amant. . . . .	75 00	Deschambault, P.Q.
28	" Néré Bellisle. . . . .	75 00	Deschambault, P.Q.
29	" Narcisse Perrault. . . . .	75 00	Deschambault, P.Q.
30	Widow C. Lydéric Bouillé. . . . .	32 00	Three Rivers, P.Q.
31	" Joseph G. Dussault. . . . .	37 33	Deschambault, P.Q.
32	Dd. pil. Ulric Groleau. . . . .	75 00	Grondines, P.Q.
33	" Prudent Beaudet. . . . .	75 00	36 Ste. Famille St., Quebec.
34	" Celestin Brunet. . . . .	75 00	42 Cuvilliers St., Montreal.

JAMES J. RILEY,  
*Supt. of Pilots.*

MONTREAL, DECEMBER 20th, 1910,



## SESSIONAL PAPER No. 23

## APPENDIX No. 6.—MONTREAL PILOTAGE OFFICE.

STATEMENT showing the number and sort of vessels reported in this office, total tonnage, total of crews and number of passengers inward for seasons 1909 and 1910.

	1909	1910
Sea going vessels. . . . .	637	719
Lake steamers. . . . .	270	310
Schooners. . . . .	27	34
Barges, tugs and steam yachts. . . . .	15	12
	<hr/>	<hr/>
Total. . . . .	949	1075
Total tonnage of these vessels. . . . .	2,190,756	2,542,876
The number of the masters and crews was. . . . .	46,841	60,891
Number of passengers inward. . . . .	46,618	78,405

MONTREAL, DECEMBER 20th, 1910.

## APPENDIX No. 7.—MONTREAL PILOTAGE OFFICE.

At the opening of navigation 1904, the number of branch pilots was (53) fifty-three. These three taken off, reduce the number to (50) fifty.

Pilot 'Cyrille Bélisle, died May 26th, 1905.

“ J. Sifroid Labranche, dismissed, October 4th, 1905.

“ Gédéon Groleau, pensioned May 1st, 1906.

Pilot Alfred Frenette, pensioned from May 1st, 1906—replaced by Oswald Frenette, branched March 26th, 1906.

Pilot Alfred St. Amant, pensioned from June 1st, 1906—replaced by Chas. B. Hamelin, branched June 8th, 1906.

Pilot Néré Bellisle, pensioned from November 27th, 1906—replaced by Tan-crède Perron, branched December 1st, 1906.

Pilot Narcisse Perrault, pensioned from January 11th, 1907—replaced by J. Delavoie Frenette, branched April 1st, 1907.

Pilot Jos. Edouard Pleau, dismissed from January 11th, 1907.—replaced by Fortunat Hamelin, branched April 20th, 1907.

Pilot Nestor Arcand, pensioned from May 1st, 1907—replaced by J. Cyriac Gauthier, branched July 3rd, 1907.

Pilot C. Lydéric Bouillé, pensioned from May 1st, 1908—replaced by J. B. Angers, branched July 7th, 1908.

Pilot G. Jos. Dessault, pensioned from November 20th, 1908—replaced by David J. Perrault, branched January 15th, 1909.

Pilot Ulric Groleau, pensioned from April 24th, 1909—replaced by Napoleon Lachance, branched June 4th, 1909.

Pilot J. B. Nadeau, resignation tendered October 21st, 1908, resignation accepted May 4th, 1909—replaced by Henri Bouillé, branched June 25th, 1909.

Pilot Prudent Beaudet, pensioned from August 1st, 1909—replaced by Théode Perron, branched August 1st, 1909.

Pilot Geo. Dufresne, pensioned from May 1st, 1910—replaced by Bona Dus-sault, branched May 2nd, 1910.

Pilot Célestin Brunet, pensioned from August 2nd, 1910—replaced by Jos. Arthur Arcand, branched August 2nd, 1910.

JAMES J. RILEY,  
*Supt. of Pilots,*



PILOTAGE RATES.

APPENDIX No. 8.

By-LAW 44 of the By-Laws of the Montreal Pilotage District.

By-law 44.—From and after the coming into force of the present by-laws, the following fees shall be payable for pilotage between the harbours of Montreal and Quebec, and between the several places therein mentioned.

FROM FATHER POINT TO QUEBEC.—PER FOOT.	Upwards.	Downwards.
	\$ cts.	\$ cts.
May 1st to November 10th. . . . .	3 87	3 40
November 10th to November 19th. . . . .	4 95	4 46
November 19th to March 1st. . . . .	6 02	5 54
March 1st to May 1st. . . . .	4 41	3 93

MONTREAL TO QUEBEC.

From the harbour of Quebec to Portneuf and the opposite side of the river St. Lawrence, or below Portneuf and above the harbour of Quebec.

For the pilotage of any vessel in tow, or propelled by steam (except as hereinafter mentioned) for each foot of draught of water:—

Upwards. . . . .	\$ 0 50
Downwards. . . . .	0 50

For the pilotage of any sea-going vessel propelled by steam, for each foot of draught of water:—

Upwards. . . . .	\$0 62½
Downwards. . . . .	0 62½

For the pilotage of any vessel under sail, for each foot of draught of water:—

Upwards. . . . .	\$1 05
Downwards. . . . .	0 70

From the harbour of Quebec to Three Rivers and the opposite side of the river St. Lawrence, or any place above Portneuf and below Three Rivers.

For the pilotage of any vessel in tow or propelled by steam (except as hereinafter mentioned), for each foot of draught of water:—

Upwards. . . . .	\$1 50
Downwards. . . . .	1 50

For the pilotage of any sea-going vessel propelled by steam, for each foot of draught of water:—

Upwards. . . . .	\$1 75
Downwards. . . . .	1 75
From Montreal to Three Rivers. . . . .	1 75
From Three Rivers to Quebec. . . . .	1 75

For the pilotage of any vessel under sail, for each foot of draught of water:—

Upwards. . . . .	\$2 60
Downwards. . . . .	1 90



## SESSIONAL PAPER No. 23

From the harbour of Quebec to Sorel and the opposite side of the river St. Lawrence, or any place above Three Rivers and below Sorel:—

For the pilotage of any vessel in tow or propelled by steam (except as herein-after mentioned), for each foot of draught of water:—

Upwards. . . . .	\$1 50
Downwards. . . . .	1 50

For the pilotage of any sea-going vessel propelled by steam, for each foot of draught of water:—

Upwards. . . . .	\$1 87½
Downwards. . . . .	1 87½

For the pilotage of any vessel under sail, for each foot of draught of water:—

Upwards. . . . .	\$3 15
Downwards. . . . .	2 10

From the Harbour of Quebec to the harbour of Montreal, or to any place above Sorel and below the harbour of Montreal:—

For the pilotage of any vessel in tow or propelled by steam (except as herein-after mentioned), for each foot of draught or water:—

Upwards. . . . .	\$2 00
Downwards. . . . .	2 00

For the pilotage of any sea-going vessel propelled by steam, for each foot of draught of water:—

Upwards. . . . .	2 50
Downwards. . . . .	2 50

For the pilotage of any vessel under sail, for each foot of draught of water:—

Upwards. . . . .	4 20
Downwards. . . . .	2 80

From the harbour of Montreal to Sorel or to any place above Sorel and below Hochelaga, and from Sorel, or to any place above Sorel and below Hochelaga, to the harbour of Montreal, for each foot of draught of water for each such pilotage:—

Upwards. . . . .	\$1 00
Downwards. . . . .	1 00

For the removal of any vessel from one wharf to another, within the limits of the harbour; or from any of the wharves into the Lachine canal; or out of the said canal to any of the wharves in the harbour; or from the foot of the current; or from Longueuil into the harbour; or from the harbour to the foot of the current or to Longueuil:—

For each such service.	\$5 00
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## APPENDIX No. 13.

REPORT OF THE PILOTAGE DISTRICT OF MIRAMICHI, N.B., FOR THE  
YEAR ENDING 31st DECEMBER, 1910.

Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to hand you herewith, the pilotage returns for the  
pilotage district of Miramichi, N.B., for the year ending 31st December, 1910.

I am, sir,  
Your obedient servant,

BYRON N. CALL.  
*Secretary-Treasurer.*

## PILOTAGE RETURNS,

Class of Vessels.	No. of Vessels.	Total.
Vessels reported inwards—		
British steamers. . . . .	42	
“ sailing vessels. . . . .	21	
Foreign steamers. . . . .	32	
“ sailing vessels. . . . .	17	
		112
Vessels reported outwards—		
British steamers. . . . .	42	
“ sailing vessels. . . . .	19	
Foreign steamers. . . . .	32	
“ sailing vessels. . . . .	18	
		111
Vessels removed—		
British steamers. . . . .	15	
“ sailing vessels. . . . .	1	
Foreign steamers. . . . .	13	
“ sailing vessels. . . . .	4	
		33



SESSIONAL PAPER No. 23

## PILOTAGE RETURNS.

Class of vessels.	Amount	Total.
	\$ cts.	\$ cts.
Amounts received from inward pilotage—		
From British steamers. . . . .	2,319 28	
“ “ sailing vessels. . . . .	464 66	
From Foreign steamers. . . . .	2,005 78	
“ “ sailing vessels. . . . .	128 91	
		5,218 83
Amounts received from outward pilotage—		
From British steamers	2,286 16	
“ “ sailing vessels.	498 00	
From Foreign steamers.	2,364 38	
“ “ sailing vessels.	549 50	
		5,698 04
Amounts received for removals—		
From British steamers. . . . .	142 00	
“ “ sailing vessels. . . . .	10 00	
From Foreign steamers. . . . .	108 00	
“ “ sailing vessels. . . . .	32 00	
		292 00
		11,208 67

## PILOTAGE RATES.

For sailing vessels, inwards, \$2.25 per foot.

For vessels propelled wholly or in part by steam, .02 c. per registered ton, in addition to the above charge.

For sailing vessels, outwards, \$2.00 per foot; and for vessels propelled wholly or in part by steam, .02c. per registered ton, in addition to the above charge

For the removal and mooring of vessels of over 300 tons, \$4.00; and where the distance of removal exceeds four miles, 50% additional shall be charged, on the above rate.

Removals within a distance of one mile are not compulsory; but when pilots are requested to perform those services, the charge shall be \$4.00.

Steam tugs towing one or more barges with cargo, inwards, shall pay full pilotage for tug and barge; but shall pay outward pilotage, only on the tug.



LIST OF LICENSED PILOT BOATS.

No.	Name.	Tons.	Pilot.	First Licensed.
15	Princess Louise. . .	20.85	Asa Walls. . .	May, 1879
16	Senator Snowball.....	20.95	Jas. A. Nolan.....	" 1897
17	Mabel. . .	22.00	George Savoy.....	" 1900

No.	Name of pilot.	For what service.
2. .	Louis Jimmo. . . . .	Full license.
6. .	Francis Martin. . . . .	" "
7. .	Maxime Martin. . . . .	" "
10. . .	Alexander Wilson.....	" "
11. .	Robert J. Walls. . . . .	" "
22. .	William Walls, sr. . . . .	" "
26. . .	John McCallum.....	" "
27. . .	James Nowlan. . . . .	" "
29. . .	George Sutton.....	" "
30. .	James A. Nowlan. . . . .	" "
31. . .	George T. Tait. . . . .	" "
32. . .	Joseph Jimmo. . . . .	" "
33. .	James McCallum. . . . .	" "
35. . .	John Martin. . . . .	" "
36. .	Asa Walls. . . . .	" "
37. . .	William Walls. . . . .	" "
38. .	John Nowlan. . . . .	" "
41. . .	Michael J. Jimmo. . . . .	" "
42. . .	George M. Nowlan. . . . .	" "
44. . .	George Savoy. . . . .	" "



SESSIONAL PAPER No. 23

MIRAMICHI PILOTS, IN ACCOUNT WITH B. N. CALL, SECRETARY-TREASURER.

1910.			\$	cts.
Dr.				
June	18	To paid Jno. McDonald & Company for schooners. . . . .	2	51
"	18	" " J. B. Snowball Co., account <i>Senator Snowball</i> . . . . .	29	66
"	18	" " J. B. Snowball Co., account <i>Princess Louise</i> . . . . .	16	33
"	18	" " George Stothart, account <i>Senator Snowball</i> . . . . .	7	79
"	18	" " Robert J. Walls, clearing pilot office, horse hire, telegram. . . . .	8	79
"	18	" " Asa Walls, fitting schr. <i>Princess Louise</i> . . . . .	48	35
July	18	" " Miramichi Navigation Co., tickets for pilots. . . . .	3	75
"	18	" " Jas. A. Nowlan, repairs, sails <i>Senator Snowball</i> . . . . .	12	00
"	18	" " Jas. A. Nowlan, fitting out <i>Senator Snowball</i> . . . . .	4	00
Aug.	9	" " North Shore Leader, printing bill heads, &c. . . . .	3	75
"	18	" " W. S. Loggie Co., account Schr. <i>Princess Louise</i> . . . . .	48	35
"	18	" " W. S. Loggie Co., account Schr. <i>Senator Snowball</i> . . . . .	40	60
Sept.	17	" " Estate Geo. P. Searle, rent of pilot office, 1 year. . . . .	24	00
"	17	" " Asa Walls, repairs Schr. <i>Princess Louise</i> . . . . .	11	00
"	17	" " J. B. Snowball Co., account Schr. <i>Senator Snowball</i> . . . . .	4	98
"	17	" " J. B. Snowball Co., account Schr. <i>Princess Louise</i> . . . . .	5	15
"	28	" " Asa Walls, account J. J. Yorston re expense Schr. <i>Princess Louise</i> . . . . .	60	56
Oct.	24	" " Capt. Jas. A. Nowlan's sight draft, favour J. & J. Yorston, Pictou, N.S., repairs to <i>Senator Snowball</i> . . . . .	46	48
Nov.	23	" " J. B. Snowball Co., account Schr. <i>Princess Louise</i> . . . . .	2	25
"	23	" " J. B. Snowball Co., account Schr. <i>Senator Snowball</i> . . . . .	3	24
"	23	" " W. S. Loggie Co., account Schr. <i>Senator Snowball</i> . . . . .	3	90
"	23	" " W. S. Loggie Co., account Schr. <i>Princess Louise</i> . . . . .	4	28
"	23	" " Ed. Burke, account Schr. <i>Senator Sno ball</i> . . . . .	8	30
"	23	" " Ed. Burke, account Schr. <i>Princess Louise</i> . . . . .	3	05
"	26	" " Robert J. Walls, fuel, telegram, horse hire . . . . .	3	80
"	26	" " Wm. Walls, sr., his expenses re S.S. <i>Naparino</i> . . . . .	4	00
"	26	" " A. C. McLean, account Schr. <i>Princess Louise</i> . . . . .	7	71
"	26	" " A. C. McLean, account Schr. <i>Senator Snowball</i> . . . . .	4	50
"	26	" " E. Johnson, stationery for pilot office. . . . .	3	13
"	26	" " A. & R. Loggie, rent warehouse for 1 year. . . . .	10	00
"	26	" " Secretary-Treasurer, stationery, postage, telephone. . . . .	4	50
"	26	" " B. N. Call, Secretary-Treas., 3% comm'n. \$11,508.76 . . . . .	345	26
"	26	" " 17 pilots, \$9.065.18; 3 pilots, \$1,654.85. . . . .	10,720	03
			11,508	67
Cr.				
1910.				
Dec.	8	By amt. collected—		
		Inwards. . . . .	\$5,218	63
		Outwards. . . . .	5,698	04
"	8	" " collected for removals. . . . .	292	00
"	8	" " earned outside by pilots. . . . .	300	00
			11,508	67

B. N. CALL,  
Secretary-Treasurer.



APPENDIX No. 14.

REPORT OF THE PILOTAGE AUTHORITY OF NEW WESTMINSTER,  
B.C., FOR THE YEAR ENDING DECEMBER 31, 1910.

NEW WESTMINSTER, B.C., JAN. 9th, 1911.

Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—The Pilotage authority of the port of New Westminster, B.C., beg leave to submit the following report for the year 1910.

Name of Pilot.—W. S. Wooster, age 35, serving full district.

Number of vessels reported liable to pay pilotage.

	Inwards.	Outwards.
British steam vessels. . . . .	9	9
Foreign steam vessels. . . . .	1	1
Foreign sailing vessels. . . . .	3	3
	<hr/>	<hr/>
	13	13

Nationality of above vessels reported inwards.

British. . . . .	9
American. . . . .	2
Russian. . . . .	1
French. . . . .	1
	<hr/>
	13

Total amount received for pilotage services for the year as follows:—

For British vessels. . . . .	\$673 71
From foreign vessels. . . . .	232 97
	<hr/>
Total. . . . .	\$906 78

Rates of pilotage for the district are as follows:—

One dollar per foot draught of water, and one cent per net registered ton.

Respectfully submitted,

F. P. MAXWELL,  
*Secretary.*



SESSIONAL PAPER No. 23

## APPENDIX No 15.

REPORT OF THE NANAIMO PILOTAGE AUTHORITY FOR THE YEAR  
ENDED DECEMBER 31, 1910.

NANAIMO, B.C., JAN. 10th, 1911.

Deputy Minister of Marine and Fisheries,  
Ottawa, Ont.

SIR, -By direction of the Board of Pilot Commissioners, I have the honour to herewith enclose statements of the accounts of the Nanaimo Pilotage Authority for the year ending Dec. 31st, 1910.

Your obedient servant,

TULLY BOYCE,  
*Secretary.*

## STATEMENT of disbursements for the year ending December 31st, 1910.

By salary, secretary and treasurer. . . . .	\$600 00
Office expenses. . . . .	388 12
Commission to collectors. . . . .	522 40
Pilot station expense. . . . .	4,269 39
Travelling and personal expenses. . . . .	4,100 00
Reserve fund. . . . .	700 00
Net earnings. . . . .	23,447 14
	<hr/>
	\$34,027 05

J. S. KNARSTON,  
*Chairman.*TULLY BOYCE,  
*Secretary.*

THOMAS O'CONNELL,  
HARRY B. SHAW,  
W. G. FRASER,  
*Commissioners.*

## STATEMENT of vessels which paid pilotage fees for the year ending Dec. 31st, 1910.

*British.*

Steamers. . . . . 128	Pilotage fees. . . . .	\$15,329 07
Sailships . . . . . 3	Pilotage fees. . . . .	153 15
		<hr/>
		\$15,482 24

*Foreign.*

Steamers. . . . . 399	Pilotage fees. . . . .	\$17,218 46
Sailships . . . . . 19	Pilotage fees. . . . .	982 51
Barges. . . . . 16	Pilotage fees. . . . .	343 84
		<hr/>
		\$18,544 81
		<hr/>
		\$34,027 05



PILOTAGE returns for the year 1910.  
Licensed pilots—

Name.	Age.
Christensen, James.....	69
Butler, James Edgar. ....	50
Owen, William David. ....	44
Yates, Albert Francis. ...	58
Gosse, Josiah.....	46
Foote, John Calvin.....	50
Butler, John William. ....	40

Rates of pilotage:—\$1.00 per foot draught, and 1 cent per ton net register.  
Special rates for mail steamers and tugs.

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APPENDIX No. 16.

REPORT OF THE PILOTAGE AUTHORITY OF NORTHPORT AND  
TIDNISH, N.S., FOR THE YEAR ENDING 31 DECEMBER, 1910.

Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I beg to submit my annual report for the year ending 31st December, 1910.

The pilots in this district are Robert McCloskey, whose age is 69, and Ferguson Brownell, whose age is 47.

The pilotage rates are \$1.00 inwards and outwards, and \$2.50 for shifting from ballast to loading ground.

The dues collected amount to \$107.50. Amount received from British ships, \$65.50; from foreign ships, \$42.00.

Three ships entered, two loaded with lumber for the United Kingdom, and one loaded with cement and timber.

The pilots receive the dues, less 5% which the secretary retains for collecting.

I am, sir.  
Your obedient servant,

BURPEE ROCKWELL,  
*Secretary.*



SESSIONAL PAPER No. 23

## APPENDIX No. 17.

REPORT OF THE PILOTAGE AUTHORITY OF PICTOU, N.S., FOR THE  
YEAR 1910.

PICTOU, N.S., JAN. 20th, 1910.

To Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—Kindly find enclosed report pilot commissioners of port of Pictou, year 1910, which I hope you will find in order.

I am, sir, your most obedient servant,

DODD DWYER,  
*Secretary.*

## PICTOU PILOTAGE RATES.

All vessels bound inward or outward, if spoken inward or offered a pilot outward and refuses to accept the same, must pay half pilotage each way. But if a pilot is not offered, no fees shall be paid.

## RATES.

	Inwards.	Outwards.
Vessels of 120 tons to 140 tons. . . . .	\$ 6 00	\$ 4 00
“ 140 “ 200 “ . . . . .	10 00	6 00
“ 200 “ 300 “ . . . . .	12 00	8 00
“ 300 “ 400 “ . . . . .	14 00	9 00
“ 400 “ 500 “ . . . . .	15 00	10 00
“ 500 “ 600 “ . . . . .	16 00	11 00
“ 600 “ 700 “ . . . . .	17 00	12 00
“ 700 “ 800 “ . . . . .	18 00	13 00
“ 800 “ 900 “ . . . . .	19 00	14 00
“ 900 “ 1000 “ . . . . .	20 00	15 00

“ 1,000 and upwards, and 2½ cents inwards, and 2 cents outwards.

All vessels under 120 tons, \$4 inwards, and \$2 outwards.

Docking and moving vessels from anchorage in harbour, \$4.

	\$	cts.	\$	cts.
Total amount received for pilotage dues—				
Received from steam ships. . . . .	1,559	46		
“ “ sailships. . .		51 85		
				1,611 31
Of this amount—				
Received from British ships. . . . .	184	18		
“ “ foreign ships. . . . .	1,427	13		
				1,611 31

Certified, P. L. Lachance, master S.S. *Cascapedia*.



1-2 GEORGE V., A. 1911

No.	Earnings of pilots.	Age.	Amount.	Total.
			\$ cts.	\$ cts.
1	Wm. Cooke	73	230 53	
2	Chas. Cooke.	63	223 19	
4	A. Smith. .	54	279 22	
5	McG. Fraser. .	43	293 51	
6	Wm. McPherson. .	36	278 45	
7	Willard Fraser. . .	32	260 56	
				1,565 46
Receipts.			Amount.	Total.
			\$ cts.	\$ cts.
Received pilotage per statement.			1,611 31	
" from 6 pilot bonds. . .			6 00	
" from Capt. Lachance. . . . .			40 00	
Balance due Secretary. . . . .			824 77	
				2,482 08
Expenditures.			Amount.	Total.
			\$ cts.	\$ cts.
Paid pilots as per statement. . . . .			1,565 46	
" secretary's salary.			200 00	
" balance due secretary, 1909. .			716 62	
				2,482 08

DODD DWYER,  
Secretary.

A. C. MacDONALD.  
WILLIAM FRASER.  
D. A. BROWN.  
JAMES YORSTON.



## APPENDIX No. 18.

REPORT OF THE PILOTAGE AUTHORITY FOR THE DISTRICT AND  
PORT OF PARRSBORO, N.S., FOR THE YEAR ENDED  
31, DECEMBER, 1910.

7 British vessels, paid pilotage amounting to.....	\$411 50	
2 Foreign vessels, paid pilotage amounting to. ....	146 50	
		<hr/>
		\$558 00
		<hr/>
Paid Joseph Anderson, pilot. ....	\$518 94	
Secretary for salary and contingencies....	39 06	
	<hr/>	\$558 00
		<hr/>

## PILOTAGE NON-COMPULSORY.

Inwards pilotage rates, \$1.25 to \$2.50 per draught foot for sailing vessels and 50 cents per draught foot additional for steamers.

Outwards pilotage rates, \$1.50 to \$2.50 per draught foot for sailing vessels, and 50 cents per draught foot additional for steamers.

E. GILLESPIE,  
*Secretary, Parrsboro Pilotage Authority.*



APPENDIX No. 19

REPORT OF THE PILOTAGE AUTHORITY OF PUGWASH, N.B., FOR THE YEAR ENDING 31 DECEMBER, 1910.

The Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I beg to report on behalf of the pilot commissioners of Pugwash and Port Phillip, for the year ending 31st Dec., 1910.

The pilots of this district are:—Neil McKenzie, age 50; Andrew Seaman, 69; Clarence Reid, 57; Alfred E. Seaman, 32; George Heather, 68; George T. King, 31; Russel E. Heather, 29.

Names of steamers, tonnage, pilotage, and pilots' names.

Dates.	Name of Steamer.	Tonnage.	Nationality.	Pilotage.	Pilot in charge.
1910					
April.....	Magda..	1,506	British	62 77	N. McKeiver.
June. . .	Gadsby....	2,272	"	97 24	R. E. Heather.
June. . .	Enfield. . .	1,364	"	61 38	A. E. Seaman.
July.....	Inishoven Head. . . . .	1,987	"	99 41	N. McKeiver.
August...	Eastry. ....	1,924	"	81 58	R. E. Heather.
August...	Eretson Merede . . . . .	2,578	Spanish..	121 01	A. E. Seaman.
August...	Brika.	2,212	British	94 54	Geo. Heather.
Nov. . .	Memnon.	2,006	"	92 07	Neil McKeiver.
Total, 7 British; 1 Spanish . . . . .		15,849	tons.	\$710 00	
In addition to the above—					
Neil McKeiver received for piloting schooners . . . . .				34 00	
A. E. Seaman " " "				35 00	
G. T. King " " "				6 00	
				\$785 00	

The money thus earned was paid to the pilots, including all sums earned for mooring vessels.

PILOTAGE RATES.

Vessels 80 and under 104 tons, \$6.00 inwards and \$5.00 outwards.							
"	140	"	230	"	8.00	"	7.00
"	230	"	300	"	10.00	"	9.00
"	300	"	400	"	14.00	"	12.00
"	400	"	500	"	16.00	"	14.00
"	500	"	600	"	17.00	"	15.00
"	600	"	700	"	18.00	"	16.00
"	700	"	800	"	19.00	"	17.00
"	800	"	900	"	20.00	"	18.00
"	800	"	1,000	"	21.00	"	19.00



## SESSIONAL PAPER No. 23

All vessels over 1,000 tons shall pay 2½ cents inwards and 2 cents outwards per ton, in addition to the charges on the 1,000 tons registered tonnage. All vessels under 80 tons, accepting a pilot, shall pay 5 cents per ton inwards, and 4 cents per ton outwards. Vessels over 1,000 tons register, after entering the harbour, and being safely moored by a pilot, and again being moved by a pilot to a loading birth, dock or wharf, shall pay to the pilot who moves her, the sum of \$5.00; and for similar services, vessels of less than 1,000 tons register tonnage, except schooners of, or less than 300 tons, shall pay \$3.00.

The limits of the pilotage district of Pugwash are:—On the east by Cape Cliff, on the west or north-west by Lewis head, both in the County of Cumberland.

A number of schooners enter this port that do not employ a pilot.

The Maritime Clay Works, Limited, of Pugwash, shipped 2,281,000 brick, in 55 schooner cargoes. 20,000,000 feet of lumber, chiefly deals were exported.

When A. E. Scaman and R. E. Heather were boarding a ship, the pilot boat was smashed against the ship's side, but the men were not hurt. This was the only accident which occurred during the year.

There is a "Bar" across the mouth of the channel on which the water is only 16 feet deep at low tides; and as the tides rise only 6 or 8 feet, the water is seldom over 22 feet deep across this bar, making it dangerous for heavily laden vessels to cross. A few feet dredged off this bar would be a great benefit to the shipping interests of this part.

I am, sir,

Your obedient servant,

CHARLES KING,  
*Secretary.*



## APPENDIX No. 20.

REPORT OF THE SUPERINTENDENT OF THE PILOTAGE OF QUEBEC  
FOR THE YEAR ENDING DECEMBER 31, 1910.

QUEBEC, DECEMBER 31st, 1910.

To the Honourable Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to enclose you a report of the Corporation of Pilots for and below the harbour of Quebec for the year 1910.

Pilots have been examined by L. A. Demers, Esq., General Superintendent of Pilotage, and Dr. Pagè, Esq., M.D., for sight and colour vision. Three failed, namely:—Messrs. Charles Normand, Emile Lachance, Alphonse Asselin. Two have remitted their license, Joseph Lapointe and Paul Gobeil, both being 65 years old.

Father Point pilotage station was opened April 6th. There is always one director in charge of the station to keep the log-book and the bill of board of pilots on duty.

At the office at Quebec, there is also a director to book pilots for outward bound ships and see them personally before taking charge as pilot.

There are 84 pilots on the active list and 14 apprentice pilots; 6 with 3 years service; 3 with 2 years, and 5 one year.

Six pilots will take their pensions, having attained the age of 65 years, namely: Paul Gobeil, Barthelèmi Lachance, Nestor Lachance, Théodule Lachance and L. Robert Demers. The annual general meeting was held, according to law, on the 10th of December, and the following directors were selected, viz.: Messrs. Raymond Baquet, Alphonse Pouliot, Eugene Ancil, Emilio Couillard, Joseph Pouliot and Onesime Noël. At a subsequent meeting held on the 12th of the same month, Mr. Raymond Baquet was re-elected president.

Enclosed a statement showing the number of pilots on the active list during 1910, with the work effected by every member of the corporation of pilots for and below the harbour of Quebec.

Respectfully submitted,

ALFRED LAROCHELLE,  
*Superintendent of Pilots.*



## SESSIONAL PAPER No. 23

BRANCH PILOTS FOR AND BELOW THE HARBOUR OF QUEBEC, ACCORDING TO SENIORITY, THE NUMBER OF PILOTAGES EFFECTED BY EVERY PILOT, BY WHOM EMPLOYED AND TOUR DE RÔLE.

No.	Name.		Pilotage Effectuated	Age.	Residence.
1	Bart. Pepin dit Lachance . . . .	Tour-de-Rôle . . . . .	15	65	St. John, Orleans.
2	D. Eug. Boulanger . . . . .	Tour-de-Rôle . . . . .	20	67	Montmagny.
3	Ray. Baquet dit Lamontagne.	C.P.R. line, President	39	65	Notre Dame, Levis.
4	Paul, Gobeil . . . . .	Pensioned 7th Nov., 1910 . . . . .	11	64	St. John, Orleans.
5	Chs. Alarie Raymond . . . .	Director . . . . .		62	Quebec.
6	Victor Vézina . . . . .	Thomson Line . . . . .	31	65	Quebec.
7	Louis Robert Demers . . . .	Captain S.S. <i>Quebec</i> . . . .		64	Quebec.
8	Joseph G. Dupil . . . . .	Allan Line . . . . .	39	63	Quebec.
9	Nestor Lachance . . . . .	Tour-de-rôle . . . . .	16	64	St. John, Orleans.
10	Pierre Pepin dit Lachance . . .	Tour-de-rôle . . . . .	25	61	Montreal.
11	Isiode Noel . . . . .	Tour-de-rôle . . . . .	14	60	St. John, Orleans.
12	Théophile Corriveau . . . . .	Tour-de-rôle . . . . .	26	63	Quebec.
13	Elzéar Godbout . . . . .	Tour-de-rôle . . . . .	14	62	Quebec.
14	Théodule Pepin dit Lachance	Tour-de-rôle . . . . .	10	65	Montreal.
15	Achille Trefflé Simard . . . .	Head Line . . . . .	29	59	St. Joseph, Levis.
16	Narcisse Lavoie . . . . .	Tour-de-rôle . . . . .	15	61	Ste. Luce, Rimouski.
17	Joseph Emilio Couillard . . .	Director . . . . .		59	Quebec.
18	Louis Albert Royer . . . . .	Tour-de-rôle . . . . .	19	65	Quebec.
19	Onésime Noel . . . . .	Thompson Line . . . . .	29	58	St. John, Orleans.
20	Napoléon Baillargeon . . . .	Tour-de-rôle . . . . .	15	60	Quebec.
21	Frs.-X Demeules . . . . .	Manchester Line . . . . .	41	58	St. John, Orleans.
23	Louis Honoré Lapierre . . . .	Tour-de-rôle . . . . .	18	60	Notre Dame, Levis.
23	Jos. Eug. Lachance . . . . .	Tour-de-rôle . . . . .	36	56	Quebec.
24	J. Théophile St. Laurent . . . .	Dominion Line . . . . .	35	59	Quebec.
25	Joseph Victor Gourdeau . . . .	Tour-de-rôle . . . . .	15	63	Ste. Petronille, Orleans
26	Louis Trefflé Delisle . . . . .	Tour-de-rôle . . . . .	10	56	Trois Pistoles.
27	J.-Bte. Couillard . . . . .	Black Dimond . . . . .	23	59	Cap St. Ignace.
28	J. E. Bonaventure Lavoie . . . .	Tour-de-rôle . . . . .	15	58	Ste. Anne.
29	Adjutor Baillargeon . . . . .	Manchester Line . . . . .	40	56	Quebec.
30	Samuel Rioux . . . . .	Tour-de-rôle . . . . .	25	57	Rivière Trois Pistoles.
31	Charles Octave Clavet . . . . .	Black Dimond . . . . .	30	56	St. Michel, Bellechasse
32	Paul Lachance . . . . .	Allan Line . . . . .	41	54	Quebec.
33	Arcadius Jouvin . . . . .	Tour-de-rôle . . . . .	15	52	Ste. Luce, Rimouski.
34	Paul Lachance . . . . .	Tour-de-rôle . . . . .	16	55	Quebec.
35	Joseph Pouliot . . . . .	Director . . . . .		54	St. John, Orleans.
36	Adjutor Lachance . . . . .	C. P. R. Line . . . . .	39	52	Quebec.
37	Frs. Gaudreau . . . . .	C. P. R. Line . . . . .	40	59	Quebec.
38	Arthur Kœning . . . . .	Tour-de-rôle . . . . .	14	59	L'Islet.
39	Eugène Anctil . . . . .	Director . . . . .		51	Quebec.
40	David Dumas . . . . .	Tour-de-rôle . . . . .	21	57	Notre Dame, Levis.
41	Joseph Lachance . . . . .	Tour-de-rôle . . . . .	13	56	St. Laurent, Orleans.
42	Alphonse Pouliot . . . . .	Director . . . . .		58	Chateau Richer.
43	Elzéar Normand . . . . .	Tour-de-rôle . . . . .	15	51	Cap St. Ignace.
44	Jean-Bte. Bernier . . . . .	Donaldson Line . . . . .	33	51	L'Islet.
45	Joseph Paquet . . . . .	Tour-de-rôle . . . . .	18	49	Quebec.
46	Jean A. Lachance . . . . .	Tour-de-rôle . . . . .	15	48	Quebec.
47	Arthur Baillargeon . . . . .	Tour-de-rôle . . . . .	16	53	Montreal.
48	Joseph Vézina . . . . .	Black Dimond . . . . .	30	49	Quebec.
49	Herménégilde Guénard . . . . .	Tour-de-rôle . . . . .	16	52	Montmagny.
50	John A. Irvine . . . . .	Captain, Red Island lightship . . . . .		54	Green Island.
51	Frédéric Bouffard . . . . .	Tour-de-rôle . . . . .	13	53	St. Laurent, Orleans.
52	Jules Asselin . . . . .	Black Dimond . . . . .	45	49	Quebec.
53	Lucien Lachance . . . . .	Thompson Line . . . . .	35	49	Quebec.
54	Camile Bernier . . . . .	Dominion Line . . . . .	48	52	Quebec.
55	Moïse Blouin . . . . .	Tour-de-rôle . . . . .	15	59	St. Johns, Orleans.



BRANCH PILOTS FOR AND BELOW THE HARBOUR OF QUEBEC, ETC.—*Concluded.*

No.	Name.	—	Pilotage Effected	Age.	Residence.
56	Moïse Laurent Godbout. . . . .	Tour-de-rôle. . . . .	14	50	Quebec.
57	Alfred Gaudreau. . . . .	Tour-de-rôle. . . . .	13	57	Cap St. Ignace.
58	Alfred Raymond. . . . .	Head Line. . . . .	13	49	Quebec.
59	Philéas Lachance. . . . .	Manchester Line. . . . .	41	50	St. John, Orleans.
60	Joseph H. Talbot. . . . .	Tour-de-rôle. . . . .	20	48	Berthier.
61	Moïse Arthur Lachance. . . . .	Tour-de-rôle. . . . .	13	47	St. John, Orleans.
62	Louis François Thivierge. . . . .	Black Dimond. . . . .	40	44	Quebec.
63	Edmond Larochelle. . . . .	Captain <i>Lady Evelyn</i> . . . . .		44	St. Michel, Bellechasse
64	Joseph Plante. . . . .	Tour-de-rôle. . . . .	14	44	St. Paul's Bay.
65	Alphonse Paquet. . . . .	Tour-de-rôle. . . . .	16	44	St. John, Orleans.
66	Adélaré Bernier. . . . .	C. P. R. Line. . . . .	40	49	Quebec.
67	Jean-Bte. Pouliot. . . . .	Donaldson Line. . . . .	40	40	Beauport.
68	Léonidas Lachance. . . . .	Tour-de-rôle. . . . .	14	40	St. John, Orleans.
69	Eudore, Langlois. . . . .	Tour-de-rôle. . . . .	14	48	Quebec.
70	Joseph Delisle. . . . .	Tour-de-rôle. . . . .	17	36	St. John, Orleans.
71	Jules Lachance. . . . .	Allan Line. . . . .	31	26	Quebec.
72	Auguste Santerre. . . . .	Allan Line. . . . .	32	27	St. Michel, Bellechasse
73	Arthur Larochelle. . . . .	Tour-de-rôle. . . . .	16	29	St. Michel, Bellechasse
74	Raoul Lachance. . . . .	Elder Dempster Line. . . . .	21	29	St. Joseph, Levis.
75	William Langlois. . . . .	Black Dimond. . . . .	31	30	Quebec.
76	Ernest Bernier. . . . .	Black Dimond. . . . .	40	35	St. Michel, Bellechasse
77	Arthur Baquet. . . . .	Elder Dempster Line. . . . .	21	27	Notre Dame de Levis.
78	Jules Lamarre. . . . .	Tour-de-rôle. . . . .	15	26	St. Valier.
79	George Larochelle. . . . .	Tour-de-rôle. . . . .	40	31	St. Michel, Bellechasse.
80	Adélaré Delisle. . . . .	Tour-de-rôle. . . . .	39	30	Quebec.
81	Pierre L. Lachance. . . . .	Captain, S.S. <i>Cascapadia</i> . . . . .		26	Quebec.
82	Alexandre Larochelle. . . . .	Tour-de-rôle. . . . .	19	26	St. Michel, Bellechasse.
83	Joseph A. Dupil. . . . .	Tour-de-rôle. . . . .	14	26	St. Jean Port Joli.
84	Arthur Paquet. . . . .	Tour-de-rôle. . . . .	16	34	St. John, Orleans.

*Officers of the Board.*

RAYMOND BAQUET, President.  
ALPHONCE POULIOT, Director.  
CHARLES RAYMOND, Director.  
ALFRED LAROCHELLE,  
Superintendent.

JOSEPH EMILIO COUILLARD, Director  
EUGENE ANCTIL, Director.  
JOSEPH POULIOT, Director.  
F. X. DION, Secretary-Treasurer.  
PH. LAMONTAGNE, Asst. Sec.-Treas.

I hereby certify that the above is correct.

ALFRED LAROCHELLE,  
Supt., Quebec Pilots.



## SESSIONAL PAPER No. 23

F. X. DION, IN ACCOUNT WITH THE CORPORATION OF PILOTS OF QUEBEC, TO  
DECEMBER 31st, 1910.

Receipts.	Amount.
	\$ cts.
To Balance of 1909.....	763 24
Reserve Fund.....	1,000 00
Customs of Montreal.....	8,843 08
"    Trois Rivières (Three Rivers)...	527 69
"    Chicoutimi.....	1,835 47
"    Sorel.....	1,247 94
"    Rimouski.....	130 00
"    la Rivière-du-Loup....	461 36
Penalties.....	25 00
Interests, Banque Nationale....	147 70
Rental Department.....	896 00
Lost time.....	1,082 91
Board at Pointe au Père.....	2,032 58
Board remitted by Directors.....	95 58
Pilotage collected at Quebec.....	117,182 60
	136,271 17
Expenditure.	Amount.
	\$ cts.
By Interest paid on loan.....	120 00
Rental: Chouinard estate.....	600 00
"    Contributions.....	149 50
"    Special taxes.....	75 00
"    Heating and lighting....	20 77
General expenses.....	2,221 12
Expenses of pilots.....	785 25
Indemnity to directors.....	600 00
Insurance.....	35 00
Legal advisers.....	400 00
Pilotage remitted.....	856 26
Pilots pensioned.....	6,000 00
Salaries of the employees.....	1,750 00
Salary of the keeper.....	500 00
Board at Pointe-aux-Pères (Father Point)...	2,337 17
Decayed pilots' fund.....	9,111 31
Dividends.....	107,850 00
Reserve fund.....	2,000 00
Balance.....	859 79
	136,271 17

QUEBEC, DECEMBER 30th, 1910.

We, the undersigned, officially appointed to examine the books and accounts of the Corporation of Pilots of Quebec, beg to certify to having carefully examined them and having found them correct.

F. X. DION,  
*Secretary-Treasurer.*

LUCIEN LACHANCE,        }  
LEONIDAS LACHANCE,     } *Auditors.*  
J. EMILIO LABRECQUE, *Accountant.*



PILOTAGE RATES.

TABLE I.—Rates of pilotage for the harbour of Quebec and below, for each foot of draught of water.

FROM	To	From the 1st May to the 10th Nov.	From the 10th Nov. to the 19th Nov.	From the 19th Nov. to the 1st Mar.	From the 1st Mar. to the 1st May
Father Point or any place below the anchorage of Brandy Pots, off Hare Island.	Anchorage or mooring ground in the basin or harbour of Quebec.. . . . .	\$3.87	\$4.95	\$6.02	\$4.41
The anchorage ground at the Brandy Pots off Hare Island or any place above the said anchorage ground and below St. Roch's point.	" "	$\frac{2}{3}$ of this sum	$\frac{2}{3}$ of this sum.	$\frac{2}{3}$ of this sum.	$\frac{2}{3}$ of this sum.
St. Roch's Point or any place above this Point, and below the Pointe-aux-pins or Crane Island.	" "	$\frac{1}{3}$ of this sum.	$\frac{1}{3}$ of this sum.	$\frac{1}{3}$ of this sum.	$\frac{1}{3}$ of this sum.
Pointe-aux-pins or Crane Island, or any place below St. Patrick's Hole.	" "	$\frac{1}{4}$ of this sum.	$\frac{1}{4}$ of this sum.	$\frac{1}{4}$ of this sum.	$\frac{1}{4}$ of this sum.
The anchorage or mooring ground in the basin or harbour of Quebec.	Father Point or the place where the pilot shall be discharged in the river below Quebec. . . . . .	\$3.40	\$4.46	\$5.54	\$3.93

TABLE II.—Rates of pilotage for the harbour of Quebec and below.

FROM	To
Any wharf in the harbour of Quebec between Pointe-a-Carcy below, and the west end of the Allan's wharf above, both inclusive. . . . .	Any other wharf within said limits. . . . . \$2.50
Any place in the harbour of Quebec, not being a wharf within the above mentioned limits..	Any other place in the said harbour not being a wharf within the said limits.. . . . 5.00

Pilots taking charge of vessels at St. Patrick's Hole or above it, shall be entitled to no more than the sum allowed in Table II for piloting vessels from one port of the harbour to another.



SESSIONAL PAPER No. 23

(TRANSLATION).

QUEBEC, DECEMBER 31st, 1911.

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to transmit detailed statement, in duplicate, of the moneys received and paid by the Decayed Pilots' fund of Quebec, for the past year; also detailed statement in duplicate, of the moneys received and paid by the corporation of pilots, the whole audited and certified. The receipts collected by the corporation of pilots, amounted to. . . . . \$130,228 14

And the general expenses, including the 7% of the Decayed Pilots' fund of Quebec. . . . . 23,224 19  
\$107,003 95

Which yielded a declared dividend to each pilot of (\$1,325.00.) one thousand three hundred and twenty-five dollars.

762 British vessels yielded. . . . .	\$125,062 28
47 Foreign vessels yielded. . . . .	5,165 86
	<u>\$130,228 14</u>

The whole humbly submitted.

I have, &c.,

F. X. DION,  
*Secretary-Treasurer.*



1-2 GEORGE V., A. 1911

STATMENT OF MONEYS RECEIVED AND EXPENDED BY THE CORPORATION OF PILOTS FOR THE DECAYED PILOT FUND OF QUEBEC DURING THE YEAR 1910.

DR. RECEIPTS.		\$	cts.
To Balance of 1909. ....		7,337	38
Trustees of Quebec Roads, 1 year interest to July 1st, 1910. ....		1,368	00
Debentures of the City of Quebec, Class B, at 7% on \$9,000. ....		630	00
Treasury Department, 1 year to July 1st, on \$20,000 at 5%. ....		1,000	00
Corporation of Pilots, 1 year interest on \$3,000 at 4%. ....		120	00
St. Fulgence Fabrik, remitted on capital. ....		500	00
St. Valier Fabrik, remitted on capital. ....		500	00
Interest paid 28th July, 1910. ....		226	67
St. Romuald Fabrik, 1 year interest to Dec. 3rd, 1910 on \$14,000 at 4%. ...		560	00
Trustees of St. Prime, interests to Nov. 15th, 1910, on \$18,500 at 4½%. ...		832	50
Interests: Banque Nationale and Quebec. ....		202	20
Penalties. ...		125	00
Contribution of pilots. ....		9,111	51
		22,713	06
EXPENDITURE.			
By Pensions paid during the year 1910.			
Assistance. ....		100	00
Arrears. .		58	34
Quarter to Jan. 31st, 1910. ....		3,196	00
“ April 30th, 1910. ....		3,267	18
“ July 31st, 1910. ....		3,439	50
“ October 31st, 1910. ....		3,439	50
Salaries of Treasurer and assistant. ....		550	00
Deposits to Savings Banks. ....		8,600	00
Balance on hand. ....		62	54
		22,713	06
STATEMENT OF FUND.			
Money loaned. ....		92,500	00
Money in Savings Banks. ...		8,600	00
Money on hand. ....		62	54
		101,462	54
Arrears due. ....		30	00
Net capital. ....		101,432	54

F. X. DION,  
Secretary-Treasurer.

QUEBEC, DECEMBER 30th, 1910.



## SESSIONAL PAPER No. 23

RECEIPTS.		12 PILOTS AT \$216.	
	\$ cts.		\$ cts.
To balance of 1909.....	7,337 38	Genest, Edouard. . .	216 00
“ contribution of pilots. ....	9,111 31	Brown, Joseph.....	216 00
“ interests on investment. ....	4,737 17	Pouliot, Joseph... .	216 00
“ St. Fulgence Fabrik, remitted on capital. . . . .	500 00	Lachance, Moise. ....	216 00
“ St. Valier Fabrik, remitted on capital. . . . .	700 00	Audet, Cyrille. . . .	216 00
“ Penalties. . . . .	125 00	Normand, Georges. .	216 00
“ Interests from savings banks... .	202 20	Delisle, Nazaire. . .	216 00
	22,713 06	Brown, Chs. F. . . .	216 00
		Godbout, Laurent.....	216 00
		Tremblay, J. Bte., died 9th June, 1910. . . . .	131 48
		Gravel, Joseph. . . .	216 00
		Dugas, Georges. . . .	216 00
			2,507 48
EXPENDITURE.		1 PILOT AT \$176.	
By pensions. . . . .	13,500 52		
“ salaries. . . . .	550 00	Lapointe, Cyrille. ....	176 00
“ deposits in savings banks. ....	8,600 00		176 00
“ balance on hand. . . . .	62 54		
	22,713 06		
PENSIONERS AT THE EXPENSE OF THE FUND.		WIDOWS.	
Amount paid to each during the year from Nov. 1st, 1909, to Nov. 1st, 1910. The whole paid from Jan. 1st, 1910, to Dec. 31st 1910.		25 WIDOWS AT \$116.	
13 PILOTS AT \$300.			
Raymond, Hubert. . . . .	300 00	Widow Bernier, J. Bte. . . . .	116 00
Larochelle, Joseph. . . . .	300 00	“ Dufresne, Jérémie. . . .	116 00
Morin, Ls. Edmond. . . . .	300 00	“ d'Amours, David. . . .	116 00
Gobeil, Pierre. . . . .	300 00	“ Després, Auguste. . . .	116 00
Larochelle, Edmond. . . . .	300 00	“ Gobeil, Antoine. . . .	116 00
Pouliot, Adeline. . . . .	300 00	“ Langlois, Paul. . . .	116 00
Desrosiers, Elzéar. . . . .	300 00	“ Gobeil, Jean. . . .	116 00
Bernier, Abel. . . . .	300 00	“ Lapointe, Antoine. . .	116 00
Larochelle, Onésime. . . . .	300 00	“ Pouliot, J. Bte. . . .	116 00
Rioux, Napoléon. . . . .	300 00	“ Ménard, Régis.....	116 00
Delisle, F. X., pensioned from Jan. 1st, 1910.....	250 00	“ Paquet, Joseph. . . .	116 00
Normand, Charles, pensioned from 19th April, 1910. . . . .	154 24	“ Pouliot, Jean.....	116 00
Lapointe, Joseph, pensioned from 19th April, 1910. . . . .	159 24	“ Dumas, Charles. . . .	116 00
	3,568 48	“ Dumas, F. . . . .	116 00
		“ Vaillancourt, Alex. . .	116 00
		“ Vézina, Charles. . . .	116 00
		“ Adam, J. E. . . . .	116 00
		“ Baquet, Annibal. . . . .	116 00
		“ Demers, Victor. . . . .	116 00
		“ Pouliot, Joseph. . . . .	116 00
		“ d'Amours, Achille. . . .	116 00
		“ Lachance, Numa. . . . .	116 00
		“ Lamarre, F. X. . . . .	116 00
		“ Chamberland, Ephrem. . . .	116 00
		“ Fortier, Joseph. . . . .	116 00
			2,900 00
2 PILOTS AT \$270.			
Asselin, Alphonse, pensioned from 19th April, 1910. . . . .	143 36		
Lachance, Emile, pensioned from 19th April, 1910. . . . .	143 36		
	286 72		



11 WIDOWS AT \$112.		\$ cts.	1 WIDOW AT \$76.		\$ cts.
Widow	Gourdeau, Théo. ....	112 00	Widow	Thivierge, Joseph. ....	76 00
"	Delisle, Jean. ....	112 00			76 00
"	Lachance, Jos. (Pépin) ..	112 00		1 WIDOW AT \$68.	
"	Forgues, Uarcisse. ....	112 00	Widow	Dallaire, Napoléon. ....	68 00
"	Delisle, F. X. ....	112 00			68 00
"	Lemieux, Pierre, balance of 1909. ....	28 00		1 WIDOW AT \$64.	
"	Lemieux, Pierre, 1910..		Widow	Turgeon, Alfred. ....	64 00
"	Ruellard, Pierre. ....	112 00			64 00
"	Lamarre, Jean F. ....	112 00		CHILDREN.	
"	Patoine, J. Bte. ....	112 00		14 CHILDREN AT \$30.	
"	Carodeau, Nazaire. ....	112 00	Child	Dugas, Jean. ....	30 00
"	Chouinard, Thomas. ....	112 00	"	Forbes, Isaac (2). ....	56 00
		1,260 00	"	Giroux, Jean. ....	30 00
			"	Langlois, Joseph. ....	30 00
5 WIDOWS AT \$110.			"	Toussaint, Pierre, died 3rd April, 1910. ....	12 50
Widow	Doiron, Eustache. ...	110 00	"	Plante, Joseph	30 00
"	Fortin, Nicolas. ...	110 00	"	Noel, F. ....	30 00
"	Després, Georges. ....	110 00	"	Chouinard, Chs. ....	30 00
"	Sansterre, Adélar	110 00	"	Gobeil, John. ....	30 00
"	Paquet, Paul. ....	110 00	"	Babin, Damase. ....	30 00
		550 00	"	Descombes, Pierre. ....	30 00
			"	Talbot, J. Bte. ....	30 00
6 WIDOWS AT \$106.			"	Langlois, Cyprien (due). ....	
Widow	Curodeau, Pierre. ....	106 00			386 50
"	Bernier, J. F. X.	106 00		RECAPITULATION OF PENSIONS.	
"	Mercier, Magloire.	106 00	13 Pilots at \$300. ....		3,568 48
"	Langlois, Philéas. ....	106 00	2 "	270. ....	286 72
"	Labrèque, Léon. ....	106 00	12 "	216	2,507 48
"	Pouliot, Napoléon. ....	106 00	1 "	176. ....	176 00
		636 00	25 Widows at 116		2,900 00
			11 "	112. ....	1,260 00
6 WIDOWS AT \$100.			5 "	110. ....	550 00
Widow	Fournier, Amable. ....	25 00	6 "	106. ....	636 00
"	Glynn, Dennis. ....	100 00	6 "	100. ....	525 00
"	Ross, Pierre. ....	100 00	4 "	96. ....	384 00
"	Langelier, Fabien. ....	100 00	1 "	76. ....	76 00
"	Dion, Alfred. ....	100 00	1 "	68. ....	68 00
"	Dion, Joseph. ....	100 00	1 "	64.	64 00
		525 00	14 children at 30. ....		368 50
			Arrears. ...		30 34
4 WIDOWS AT \$96.			102 Pensioners. ....		13,500 52
Widow	Lévesque, Joseph. ....	96 00			
"	Pineau, Benjamin. ....	96 00			
"	Pelletier, David. ....	96 00			
"	Lachance, Ovide. ....	96 00			
		384 00			

N.B.—We, the undersigned, officially appointed to examine the books and accounts of the Decayed Pilot Fund of Quebec, beg to certify to having carefully examined them; also to having checked the amounts deposited in the savings banks. The whole was found correct and in perfect order.

LUCIEN LACHANCE,  
R. LACHANCE,  
J. EMILIO LACHANCE,  
Auditors.  
Accountant.



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## APPENDIX No. 21.

REPORT OF RICHIBUCTO, N.B., PILOTAGE AUTHORITY FOR THE  
YEAR ENDING 31ST DECEMBER, 1910.RICHIBUCTO, N.B.,  
DECEMBER 31st, 1910.Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—The commissioners held their annual meeting on the 30th of March, at 3 p.m., the commissioners present being, William J. Brait, Frank Curren, W. E. Forbes, and Fred'k. Ferguson; absent, R. O'Leary.

The chairman, W. J. Brait, called the meeting to order, and the minutes of last meeting were read and adopted.

The pilots present were, George Long, William Long, Henry Erving, Albert Long, John Carwin and James Long, all of whom received licenses for 1910.

The commissioners decided to ask the government to dredge the harbour, and W. J. Brait, chairman, was authorized to draw up a petition to be forwarded to Ottawa.

The schooners John H. Ploomer and Neil Dowe went ashore on the south beach in October last, and became total wrecks.

Fifteen foreign vessels with a total tonnage of 5,015 tons, 106 coasters with a total tonnage of 5,310 tons, loaded and sailed from this port during the year.

The water in the north channel is deeper than it was last year. Two large steamers entered and went out, partly loaded, without difficulty; and the commissioners are confident that a reasonable amount of dredging would greatly improve the harbour.

I am, sir,  
Your obedient servant,

FRED. FERGUSON,  
*Secretary.*

## APPENDIX No. 22.

REPORT OF THE PILOTAGE AUTHORITY OF RICHMOND, N.S., FOR  
YEAR ENDING DECEMBER 31st, 1910.Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report on the pilotage authority of the County of Richmond, for the year ending 31st December, 1910.

I have to say that since the law was changed so as to exempt all vessels under 120 tons, registered tonnage, from pilotage dues, very little pilotage is done, as the sailing vessels are small and steamers are exempt from pilotage.

There are only three pilots in this district. They collect their own fees; and as they pilot so few vessels, they have not seen fit to report to me the number of vessels piloted or the amounts collected.

I am, sir,  
Your obedient servant,

ISIDORE LeBLANC,  
*Secretary.*

ARICHAT, N.S., DECEMBER 28th, 1910.



APPENDIX No. 23.

REPORT OF PILOTAGE COMMISSIONERS OF THE DISTRICT OF  
RESTIGOUCHE, N.B., FOR THE YEAR ENDING DECEMBER 31,  
1910.

Ports.	Steam.		Sail.		Total.		Dues.		Com- mission.	Net to Pilots.
	No.	Tons.	No.	Tons.	No.	Tons.	\$	cts.	\$	cts.
Campbellton, N.B.	29	38,918	29	16,577	58	55,495	3,465	86	103	97
Dalhousie, N.B. . . .	19	34,206	14	8,645	33	42,851	1,530	79	45	92
River Louison. . . .	5	8,628	4	1,534	9	10,163	441	96	13	25
	53	81,753	47	26,756	100	108,509	5,438	61	163	14

Members of the Pilotage Club of Restigouche, N.B.:—

Name.	Age.
Robt. McNeil, retired 16th Sept., 1910. . . . .	49
Jos. Elsliger. . . . .	54
Neil Neilson. . . . .	36
Wm. Donahue. . . . .	43
Daniel C. McNeil. . . . .	34
Edward Elsliger. . . . .	45
John McNeil, Pilot Master. . . . .	31

Commissioners for district:—

- WM. F. NAPIER, *Chairman*.
- W. S. MONTGOMERY.
- A. H. HILYARD.
- D. CHAMPOUX.
- F. S. BLAIR, *Secretary-Treasurer*.

PILOTAGE RATES.

The rates of pilotage, including the properly securing and mooring all ships or vessels, pilotage for the several ports within the pilotage district of Restigouche shall be as follows:—For every foot of water any ship or vessel shall draw at the time inward or outward bound in the port of Dalhousie, Benjamin, Beaver Point, Nash's Creek, Jacquet River, or any loading station east of Dalhousie on the Bay of Chaleur, \$1.50; port of Campbellton, \$2; Oak Bay or any loading station east of same, west of Dalhousie, \$2, when ships proceed direct from sea.

Ships bound for Dalhousie, Benjamin, Beaver Point, Nash's Creek, Jacquet river, or any loading station east of Dalhousie, calling at any of the said harbours for orders, or to discharge ballast, cargo, or otherwise on ship's account, \$1.50, and thence to the said port or loading stations on the Bay of Chaleur, \$0.75 per foot draught of such ship at the time.

Ships bound for Campbellton, Oak Bay or any loading station east of Oak Bay and west of Dalhousie, waiting at Dalhousie or any of the outer or bay ports



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to discharge ballast, cargo, or otherwise on ship's account, \$1.50, and thence to the said port of Campbellton, \$0.75; Oak Bay or any loading station east of Oak Bay, and west of Dalhousie, \$0.75 per foot draught of such ship at the time, and vice versa.

For the removal of any ship, including the properly securing and mooring such ship, the following rates, viz.:—The sum of one dollar and fifty cents for ships not exceeding one hundred and twenty tons; the sum of two dollars for ships over one hundred and twenty tons and not exceeding two hundred tons; the sum of three dollars for ships over two hundred tons, and not exceeding three hundred tons; the sum of four dollars for ships over three hundred tons, and not exceeding six hundred tons; and the sum of five dollars for all ships over six hundred tons; and when the distance of removal extends four miles, fifty per cent additional to above rates. In addition to above rates all vessels propelled wholly or in part by steam shall pay one cent inwards and one cent outwards per net registered tonnage.

FRANK S. BLAIR,  
*Secretary-Treasurer.*

WM. F. NAPIER, *Chairman.*  
Campbellton, N.B., 31st Dec., 1910.

## APPENDIX No. 24.

REPORT OF PILOTAGE AUTHORITY OF SYDNEY, N.S., FOR THE  
YEAR 1910.

A. JOHNSTON, Esq.,  
Deputy Minister Marine and Fisheries,  
Ottawa.

SIR,—Herewith please find returns in connection with Pilotage Authority, district of Sydney, N.S., for year ending December 31st, 1910.

I am, sir,  
Your obedient servant,

W. H. RICHARDSON,  
*Secretary.*

## STATEMENT OF RELIEF.

Name.	Amount.
Maurice Doyle.....	\$ 50 00
W. Ratchford (retired)...	50 00
George Townsend “	50 00
G. B. Brown “	50 00
John Fraser “	50 00
L. Connell “	50 00
Isabella MacGilvary (widow)	30 00
Catherine MacGilvary “	30 00
Margaret Petrie “	30 00
Mrs. Daley “	30 00
Mrs. McInnis, “	30 00
Mary Petrie “	30 00
Mrs. Ratchford “	30 00
Mrs. Brown “	30 00
	\$540 00



NAMES OF PILOTS AND EARNINGS FOR YEAR 1910.

No.	Name.	Amount.
1. . . .	John Cann. . . . .	\$916 20
2. . . .	John Mullins. . . . .	916 20
3. . . .	Wm. Perry. . . . .	916 20
4. . . .	George Fraser. . . . .	916 20
5. . . .	John Carroll. . . . .	916 20
6. . . .	James Carroll. . . . .	916 20
7. . . .	L. Ling. . . . .	916 20
8. . . .	J. McGilvary. . . . .	916 20
9. . . .	J. B. MacGilvary. . . . .	916 20
10. . . .	Thos. McNeil. . . . .	916 20
11. . . .	Thos. Rudderham. . . . .	916 20
12. . . .	John McNeil. . . . .	916 20
12. . . .	Bernard Mullins. . . . .	916 20
14. . . .	D. A. McInnis. . . . .	916 20
15. . . .	Joseph Brown. . . . .	916 20
16. . . .	Henry Petrie. . . . .	916 20
17. . . .	James Fraser. . . . .	916 20
18. . . .	Thos. Ratchford. . . . .	916 20
19. . . .	Wm. Langille. . . . .	916 20
20. . . .	John T. Coffin. . . . .	916 20
21. . . .	M. Curran. . . . .	916 20
22. . . .	D. D. Petrie. . . . .	916 20
23. . . .	E. F. Petrie. . . . .	916 20
24. . . .	E. D. Carn. . . . .	916 20
25. . . .	Louis Carroll. . . . .	916 20
26. . . .	H. Ratchford. . . . .	916 20
27. . . .	John Boutilier. . . . .	916 20
28. . . .	George Spencer. . . . .	916 20
29. . . .	Thos. Roberts. . . . .	916 20
30. . . .	V. MacGilvary. . . . .	916 20
31. . . .	Thos. Burke. . . . .	916 20
32. . . .	A. R. Richardson. . . . .	916 20
33. . . .	John Mahon. . . . .	916 20
34. . . .	James Shanahan. . . . .	916 20
35. . . .	Peter Rigby. . . . .	916 20
		\$32,067 00

NAMES OF APPRENTICES AND EARNINGS FOR YEAR 1910.

No.	Name.	Amount.
1. . . . .	James Young. . . . .	\$458 12
2. . . . .	William Young. . . . .	458 12
3. . . . .	Joseph Hendrigon. . . . .	458 12
4. . . . .	Frank McGilvary. . . . .	458 12
5. . . . .	Jno. Beaton. . . . .	458 13
6. . . . .	Geo. Brewer. . . . .	458 13
		\$2,748 74



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## WHITE FLAG STEAMERS LICENSED 1910.

Name.	Amount.
S.S. <i>Cape Breton</i> . .	\$100 00
" <i>Louisburg</i> ..	100 00
" <i>Coban</i> .....	100 00
" <i>Caconna</i> ..	100 00
" <i>Bonorista</i> ...	100 00
" <i>Harton</i> ..	100 00
" <i>Wasis</i> .. . . .	100 00
" <i>Woban</i> ..	100 00
	<hr/>
	\$800 00

RECEIPTS.		EXPENDITURES.	
Pilotage receipts. . . . .	\$34,815 74	Paid Pilots. . . . .	\$32,067 00
Relief and Commission. . .	1,958 90	" Apprentice. . . .	2,748 74
Pilot licenses. . . . .	126 00	" Relief. . . . .	540 00
Boat licenses. . . . .	11 00	" Sec.-Treas. . . . .	500 00
White flag licenses. . .	800 00	" Com. expenses. . . . .	550 00
Fines. . . . .	75 00	" 3 collectors. . . . .	750 00
Balance, December 31st, 1909. . .	785 54	" Office rent. . . . .	100 00
	<hr/>	" Supt. pilots. . . . .	250 00
	\$38,572 18	" Telephone. . . . .	32 50
	37,561 74	" Printing. . . . .	11 50
	<hr/>	" Horsehire & stationery	12 00
Balance, Dec. 31st, 1910. .	\$1,010 44		<hr/>
			\$37,561 74



## APPENDIX No. 25.

## REPORT OF THE PILOTAGE AUTHORITY OF ST. ANN'S, COUNTY VICTORIA, N.S., FOR THE YEAR ENDING DECEMBER 31, 1910.

ENGLISHTOWN, FEB. 20th, 1911.

A. JOHNSTON, Esq.,

Deputy Minister of Marine and Fisheries.

SIR,—I beg to submit the annual report of the Pilotage Authority of St. Ann's, N.S., for the year ending 31st December, 1910, including a copy of the pilotage regulations, all of which, I hope, will prove satisfactory.

No British vessels, subject to pilotage, entered the port during the past year.

The names of the pilots are:—Joseph Fader, A. B. Morrison, Dan. Buchanan, A. Carmichael.

## PILOTAGE REGULATIONS FOR THE GUIDANCE OF PILOTS FOR THE PILOTAGE DISTRICT OF ST. ANN'S, IN THE COUNTY OF VICTORIA, N.S.

The subjoined by-laws and regulations for the guidance of pilots for the pilotage district of the port of St. Ann's, in the County of Victoria, were passed at a meeting of the Pilotage Authority for that district, which was held in the Pilot commissioners' office, at Englishtown, on the 21st day of March, A.D. 1904. They were approved at Ottawa on Saturday, 23rd day of April, 1904, and published in the Canada Gazette.

1. Every pilot when taking a vessel to sea must be provided with a boat to bring him to port when his services are ended, and every boat must be provided with a flag and light and be numbered as required by Section 80, Pilotage Act.

2. Every pilot, when licensed, shall pay a fee of \$5 for the first time, and \$4 for every renewal of license. Masters and mates of sailing vessels shall pay a fee of \$8 for license and for every renewal shall pay a fee of \$7. Masters and mates of steamships shall pay a fee of \$18 for license and for every renewal of license shall pay a fee of \$15.

3. The number of pilots for this district shall not exceed four (4) and the rate of pilotage shall be as set forth in the scale of fees attached to each pilot's license.

4. Any pilot belonging to another district in charge of a vessel shall immediately surrender his charge when spoken by any of the pilots within the limits of this district.

5. Any pilot incapacitated by mental or bodily infirmities, or by habits of drunkenness, shall forfeit his license, and any pilot guilty of drunkenness while on duty shall be suspended for three months.

6. Pilots hailing or tendering their service to vessels previous to entering the port of St. Ann's shall be entitled to half pay when rejected, and when tendering their service outward and rejected shall receive half pay.

7. Disputes between masters of vessels and pilots regarding pilotage shall be referred to and decided by the pilotage authority of the district.

MURDOCH SMETTE,  
ANGUS J. MACRITCHIE,  
DONALD MCAULAY,

*Commissioners of pilots for district of St. Ann's,  
in the County of Victoria, N.S.*



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SCALE OF PILOTAGE FEES FOR THE PILOTAGE DISTRICT OF ST. ANN'S, IN THE COUNTY OF VICTORIA, N.S.

Vessels of	120 to	200 tons.		\$ 7 00
"	200 "	250 "		8.00
"	250 "	300 "		9 00
"	300 "	350 "		12 00
"	350 "	400 "		13 00
"	400 "	450 "		14 00
"	450 "	500 "		15 00
"	500 "	600 "		16 00
"	600 "	700 "		17 00
"	700 "	800 "		18 00
"	800 "	900 "		19 00
"	900 "	1000 "		20 00
"	1000 "	1500 "		21 00
"	1500 "	2000 "		24 00

RETURN of vessels that paid pilotage at the port of St. Ann's.

Date.	Name of vessels.	Nationality.	Tonnage.	Amount of Pilotage.
May 18-20....	S.S. Francis.	Norway. .	696	\$34 00
June 11-13....	" Vinland.	"	670	34 00
" 11-15.	" Francis.....	"	696	34 00
" 26-30....	" Vinland. ....	"	670	34 00
July 12-14....	" "	"	670	34 00
" 26-28....	" "	"	670	34 00
Aug. 10-12....	" "	"	670	34 00
" 22-24..	" "	"	670	34 00
Sept. 8-10	" "	"	670	34 00
" 12-17....	" Francis.....	"	696	34 00
" 22-26....	" Vinland. ....	"	670	34 00
Oct. 9-12....	" "	"	670	34 00
" 25.....	" "	"	670	34 00
Nov. 16-18....	" "	"	670	34 00
Nov. 30-Dec. 2.	" Francis.....	"	696	34 00
Dec. 2- 7....	" Vinland. ....	"	670	34 00
				\$544 00

I certify the above statements to be correct.

DONALD McAULAY,  
*Secretary, Pilotage Authority.*



APPENDIX No. 26.

REPORT OF THE PILOTAGE AUTHORITY OF ST. JOHN, N.B., FOR THE  
YEAR ENDING DECEMBER 31, 1910.

JANUARY 7th, 1911.

SIR,—Enclosed herewith please find the annual returns for pilotage for this district, for the year ending the 31st of December, 1910.

I have the honor to be,  
Sir,  
Your obedient servant,

J. M. THOMAS,  
*Secretary.*

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa, Ont.

REVENUE ACCOUNT.

	\$	cts.	\$	cts.
Receipts—				
Licenses to 23 pilots at \$5.00. . .	115	00		
Arrears. . . . .	10	00		
Licenses to 5 boats at \$10.00. . . . .	50	00		
25c. per foot from outward pilotage to date.	2,277	12		
				\$2,452 12
Expenditures—				
Auditing accounts for 1909.	25	00		
J. & A. McMillan account. . . . .	25	30		
Office rent. . . . .	100	00		
Salary, Sec.-Treas. . . . .	1,000	00		
Legal expenses. . . . .	301	70		
Sundries. . . . .	16	00		
	1,468	00		
Amount transferred to pilot fund account. . . . .	984	12		
				\$2,452 12

PILOT FUND ACCOUNT.

	DR.	\$	cts.	\$	cts.
To pensions paid to 3 pilots. . . . .		581	25		
“ “ widows. . . . .		1,431	25		
Grant toward funeral expenses. . . . .		20	00		
					2,032 50
Balance. . . . .					5,006 23
					7,038 73
	CR.				
By Balance, 31st Dec., 1909. . . . .				5,801	98
“ Interest, Dominion Savings Bank deposits, 12 months to 1st April, 1910. . . . .		252	63		
“ Amount from revenue account. . . . .		984	12		
				1,236	75
					7,038 73
“ Balance to credit of pilot fund account, December 31st, 1910. . . . .					5,006 23



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## SPECIAL FUND.

DR.	\$ cts.	\$ cts.
To amount paid legal expenses in suit Cumberland Ry. & Coal Coy. vs. The Saint John Pilot Commissioners. ....	400 00	
To Balance. ....	7,724 86	8,124 86
CR.		
By Balance, 31st December, 1909. ....	6,339 61	
" 5% from net earnings of pilots for year ending Dec. 31st, 1910. ....	1,785 25	8,124 86
" Balance to credit of special fund, Dec. 31st, 1910. ....		7,724 86

STATEMENT of funds.—The Saint John Pilot Commissioners, as per auditors' report, December 31st, 1910.

INVESTMENT ACCOUNT.	\$ cts.	\$ cts.
Dominion Savings Bank— Per pass book No. 744. ....	6,055 68	
Per pass book No. 10,260. ....	2,618 32	8,674 00
Current account, Bank of New Brunswick. ....		4,057 09
		12,731 09

RETURN of vessels arriving at port of Saint John, N.B. (subject to pilotage), for year ending December 31st, 1910.

	British.	Foreign.	Total.
Schooners. ....	116	166	281
Brigs and brigantines	1		1
Ships. ....			
Barques and barquentines. ....	2	8	10
Steamships. ....	245	28	273
Total. ....	363	202	565
Amount of pilotage received. ....	\$31,124 93	\$6,770 69	\$37,895 62



1-2 GEORGE V., A. 1911

PILOTS INDIVIDUAL EARNINGS FOR YEAR 1910.

	\$	cts.	\$	cts.
Total amount of pilotage received. . . . .			37,895	62
Less—25c. per foot outward pilotage. . . . .	2,277	12		
5% from net pilotage. . . . .	1,785	25		
			4,062	37
			33,833	25
<i>Contra.</i>				
Bennett, James. . . . .	2,084	47		
Cline, Alfred. . . . .	376	15		
Cline, Richd. B. . . . .	1,324	05		
Doyle, James. . . . .	2,098	18		
Doherty, Joseph. . . . .	2,313	73		
Doherty, Robert. . . . .	2,455	55		
Lahey, William. . . . .	11	40		
Lahey, Frank L. . . . .	1,455	25		
Miller, James H. . . . .	1,862	62		
Murray, William. . . . .	1,572	75		
McKelvie, Fen. M. . . . .	2,491	45		
Quinn, William. . . . .	1,820	55		
Rogers, Bartholomew. . . . .	2,063	75		
Spears, James S. . . . .	773	84		
Spears, Henry. . . . .	1,293	60		
Spears, Martin. . . . .	327	95		
Spears, William J. . . . .	1,656	62		
Sherrard, John L. C. . . . .	1,644	42		
Stone, Thomas J. . . . .	2,137	47		
Scott, Richard. . . . .	367	50		
Scott, William. . . . .	1,846	75		
Thomas, John S. . . . .	1,549	40		
Traynor, Thomas. . . . .	305	80		
			33,833	25

LICENSED PILOTS, 1909-1910.

Name.	Age.	Residence.	Remarks.
Bennett, James. . . . .	53	St. John, N.B. . . . .	
Cline, Alfred. . . . .	53	" . . . . .	
Cline, Richd. B. . . . .	40	" . . . . .	
Doyle, James. . . . .	73	" . . . . .	
Doherty, Joseph. . . . .	64	" . . . . .	
Doherty, Robert. . . . .	25	" . . . . .	
Lahey, Frank L. . . . .	39	" . . . . .	
Miller, James H. . . . .	31	" . . . . .	
Murray, William. . . . .	37	" . . . . .	
Quinn, William. . . . .	63	" . . . . .	
Rogers, Bartholomew. . . . .	53	" . . . . .	
Spears, James S. . . . .	65	" . . . . .	
Spears, Henry. . . . .	59	" . . . . .	
Spears, Martin. . . . .	53	" . . . . .	Died August 26th.
Spears, William J. . . . .	24	" . . . . .	
Sherrard, John L. C. . . . .	76	" . . . . .	
Stone, Thomas J. . . . .	57	" . . . . .	
Scott, Richard. . . . .	59	" . . . . .	
Scott, William. . . . .	54	" . . . . .	
Thomas, John S. . . . .	62	" . . . . .	
Traynor, Thomas. . . . .	57	" . . . . .	
McKelvie, Fen. M. . . . .	24	" . . . . .	
McAnulty, John. . . . .	72	Musquash, N.B. . . . .	Licensed for Musquash only.



SESSIONAL PAPER No. 23

RATES OF PILOTAGE FOR THIS PILOTAGE DISTRICT.

				PER FOOT DRAUGHT OF WAETR.		
				Inward.	Outward.	Trans- porting.
				\$ cts.	\$ cts.	\$ cts.
On all steamships—						
1st district. . . . .				2 00		
2nd “ . . . . .				2 50		
3rd “ . . . . .				3 00		
To Partridge Island. . . . .					1 75	
Down the Bay of Fundy (not compulsory) . . . . .					2 75	
On all sailing vessels—						
1st district. . . . .				1 50		
2nd “ . . . . .				1 75		
3rd “ . . . . .				2 25		
To Partridge Island. . . . .					1 25	
Down the Bay of Fundy (not compulsory) . . . . .					2 00	
200 tons and under. . . . .						2 00
From	400 tons and up to	200				3 50
“	400 “	“	500			5 00
“	500 “	“	1,000			7 00
“	1,000 “	“	1,500			9 00
“	1,500 “	“	2,000			11 00
“	2,000 “	“	2,500			13 00
“	2,500 “	“	3,000			15 00
“	3,000 “	“	3,500			17 00
“	3,500 “	“	4,000			19 00
“	4,000 “	“	4,500			21 00
“	4,500 “	“	5,000			23 00
5,000 tons and over.						25 00



APPENDIX No. 27.

REPORT OF THE PILOTAGE AUTHORITY OF SHEDIAC, N.B., FOR THE  
YEAR ENDING DECEMBER 31, 1910.

SHEDIAC, N.B., JAN. 27th, 1911.

Department of Marine and Fisheries,  
Ottawa.

GENTLEMEN,—The following are the pilots licensed by the Pilotage Authority  
of this port:—

	Age.
Thomas McGrath. . . . .	64
Olaf Hendrickson. . . . .	49
Paul P. LeBlanc. . . . .	66

The rate of pilotage for the pilotage district of the port and harbour of Shediac is \$1.50 per ft. draught of water for vessels inwards, and \$1.50 per ft. draught of water for vessels outwards bound, and for the removal of any ship or vessel, and seeing such ship or vessel properly secured and moored, the sum of \$4.00 for each such removal, hauling a vessel into the wharf or dock from the stream not to be considered a removal, also all ships or vessels propelled by steam or driven by power other than sails, shall pay 40 cents per ton on her register tonnage, in addition to the above rates.

The total amount received for year 1910 as pilotage dues from the foreign ships, is \$393.89.

The total amount received for year 1910, from the British ships is \$369.92.

All the money received was paid to the pilots for their services.

Yours truly,

E. R. McDONALD,  
*Secretary to Pilotage Authority,  
Harbour of Shediac, N.B.*



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## APPENDIX No. 28.

REPORT OF THE VICTORIA AND ESQUIMALT PILOTAGE AUTHORITY  
FOR THE YEAR ENDING DECEMBER 31, 1910.

VICTORIA, B.C., JANUARY 12th, 1911.

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to enclose the annual report for the above Authority for the year 1910.

STATEMENT SHOWING THE PILOTAGE RATES FOR THE DISTRICT OF VICTORIA AND  
ESQUIMALT, B.C.

(18) Vessels bound to other ports and coming to anchor in 'Royal Roads', the pilotage shall be free, except the services of a pilot are employed, when pilotage according to the following graduated scale shall be payable:—

From inside, or north of 'Race Rock,' to Royal bay, or vice-versa, 50 per cent of the prescribed rates under clause (b) section 18. From Beechy Head to 'Royal Roads' or vice versa, \$1 per foot.

From Pillar point to 'Royal Road' or vice versa, \$3 per foot.

From Cape Flattery to "Royal Roads", or vice versa, \$6 per foot draught of water.

(b) For vessels entering into or clearing from the ports of Victoria and Esquimalt, the rates of pilotage shall be as follows:—

(1) For regular ocean steamers, 50 cents per foot draught of water and  $\frac{1}{2}$  cent per net registered ton up to a maximum of 3,500 tons, on the inward voyage, and 50 per cent of the above on the outward voyage subject to a discount of 20 per cent.

(2) For irregular ocean steamers, \$1 per foot draught of water and  $\frac{3}{4}$  cent per net registered ton.

(3) For regular steamers in the coasting trade between San Francisco and Lynn Canal inclusive, the rates shall be the same as for regular ocean steamers as rated in Clause 1.

(4) For vessels under sail, \$2 per foot draught of water and 1 cent per net registered ton.

(5) For sailing vessels in tow \$1.50 per foot draught of water and 1 cent per net registered ton.

(6) For all vessels entering into or clearing from William's Head Quarantine Station, the rates shall be 50 per cent. of the prescribed rates of any class of vessel for Victoria and Esquimalt, subject to exemption in section 17, clause 7; provided, however, that all coasters between San Francisco and Lynn canal inclusive, when compelled by special instructions from the Dominion government to call at William's Head Quarantine Station, shall be exempt from pilotage dues unless the services of a pilot are requested.

(7) For all vessels of 500 tons and under, 75 cents per foot draught of water.

## GULF PILOTAGE.

For all vessels from the limits of the ports of Victoria and Esquimalt to the limits of all ports on Puget Sound and Gulf of Georgia, shall be \$1 per foot draught of water.



Steamers making regular trips to Victoria and Esquimalt, and having paid the prescribed rates under clause (b) on the inward voyage, and returning again to either of said harbours within a period of twenty days, shall pay only half the inward rates.

Receipts--

British. ....	\$6,900 30
Foreign. . . . .	6,641 53
Examiners' fees. . . . .	60 00
Surplus, 1909. . . . .	403 15
Services rendered Monteith. . . . .	50 00
	<hr/>
	\$14,054 98

Expenditure—

Pilots drawing, surplus, 1909. ....	\$ 403 15
Pilots' drawings. . . . .	11,565 35
Secretary's salary. . . . .	600 00
Secretary, rent and expenses. . . . .	420 00
Examiners' fees. . . . .	60 00
Miscellaneous expenses. . . . .	119 18
Exchange on cheques. . . . .	4 27
Surplus. . . . .	883 03
	<hr/>
	\$14,054 98

Names of Pilots—

	Age.
John Thompson. ....	63
William Cox. . . . .	55
John Newby. . . . .	62
Charles Israel Harris. . . . .	43

Board of Commissioners—

A. B. Fraser, Sr., Esq.  
Captain William Grant.  
H. F. Bullen, Esq.  
Captain I. A. Gould.  
F. A. Pauline, Esq.

STATEMENT OF PILOTS FOR 1910.

Receipts—

As per statement above.	
Surplus, 1909. . . . .	\$ 403 15
Drawings, 1910. ....	11,565 35
	<hr/>
	\$11,968 50

Expenditure—

As per pilots monthly	
Log for up-keep of pilots' plant. ....	\$3,789 64
Balance—net earnings of pilots. . . . .	8,178 86
	<hr/>
	\$11,968 50

A. B. FRASER, SR., Chairman.	JOSHUA KINGHAM, Secretary-Treasurer.
Audited and found correct. W. S. FRASER, Auditor.	
January 10th, 1911.	



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## APPENDIX No. 29.

REPORT OF THE VANCOUVER PILOTAGE AUTHORITY FOR THE  
YEAR ENDING DECEMBER 31, 1910.

VANCOUVER, B.C., JANUARY 5th, 1911.

The Honourable,  
The Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to enclose herewith statement of accounts and of the affairs of the Vancouver Pilotage district for year just ended, 1910.

At a meeting of the commissioners, held to-day, the accounts were audited and signed by the chairman, and I was instructed to forward same to you.

I have the honour to be,  
Sir,  
Your obedient servant,

C. GARDINER JOHNSON,  
*Secretary.*

No. of license.	Name of pilot.	Age.	Service in	Remarks.
1 1st Class	William Ettershank. ....	68	Licensed to pilot vessels of any size or description within the Limits of the Vancouver pilotage district.	Active.
2 1st Class.....	George W. Robertson. .	60		"
3 1st Class.....	H. Robson Jones. ....	55		"
4 1st Class	Donald Patterson. .	49		"
5 1st Class.....	George W. Roberts. ....	38		"
6 3rd Class. ....	Robert A. Batchelor. ....	39		"

NOTE.—Pilotage dues now in force are same as approved by Orders in Council, 19th January and 19th February, 1907, and are as follows:—

(a) For vessels under sail, \$2.00 per foot draught of water and one cent per net registered ton.

(b) For vessels in tow of a steamer, \$1.00 per foot draught of water and one cent per net registered ton.

(c) For steamers, \$1.00 per foot draught of water, and one cent per net registered ton.

The pilotage from Cape Flattery or Royal Roads to a line drawn from Point Atkinson to the nun buoy on Spanish Bank, or to the limits of Howe Sound and vice versa, is not compulsory, but if the services of a pilot are required he shall be paid the following rates:—

From Cape Flattery, \$6.00 per foot.

From Callum Bay, \$5.00 per foot.

From Beachy Head, \$1.00 per foot.

From Race Rocks or Royal Roads, \$3.00 per foot.



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And for vessels under steam or in tow of a steamer the following rates shall be paid.

- From Cape Flattery, \$3.00 per foot.
- From Callum Bay, \$2.50 per foot.
- From Race Rocks or Royal Roads, vessels under steam, \$1.00 per foot.
- From Race Rocks or Royal Roads, vessels in tow of a steamer, \$1.50 per foot.

Number.		Amount.		Total.	
		\$	cts.	\$	cts.
	Inwards—				
9	British sailers.....	311	79		
9	Foreign sailers.....	255	88		
128	British steamers....	8,614	48		
215	Foreign steamers.....	5,175	46		
				14,357	61
	Outwards—				
10	British sailers.....	347	61		
7	Foreign sailers.....	232	90		
125	British steamers.....	8,695	71		
215	Foreign steamers.....	5,070	12		
				14,346	34
				28,703	95

Remaining in port on 31st December, 1910:—

<i>Empress of India</i> ....	\$ 80 32
<i>Keemun</i> .....	98 66
<i>Moana</i> .....	238 56
<i>Oceano</i> .....	60 50
<i>Queen Alexandra</i> .....	41 38
	<hr/>
	\$519 42

	Amount.		Total.	
	\$	cts.	\$	cts.
Receipts—				
Balance in bank, 1st January, 1910.....	1,593	15		
Pilotage earnings for year 1910.....	28,703	95		
			30,297	10
Disbursements—				
Paid pilots, 5th January, 1910.....	1,593	15		
Paid pilots during year 1910.....	18,301	34		
Office expense account, 1910.....	1,086	55		
Pilotage expense account, 1910....	7,532	22		
Balance in bank.....	1,783	84		
			30,297	10



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## LEDGER BALANCE.

ASSETS.	—	Amount.	Total.
	\$ cts.	\$ cts.	\$ cts.
Bank of Montreal. . .		1,783 84	
Bank of Montreal, savings department. . . . .	802 30		
License fees. . . . .	40 00		
Interest, 1910. . . . .	24 55		
		866 85	
			2,650 69

LIABILITIES.			
Reserve fund. . . . .	802 30		
License fees. . . . .	40 00		
Interest, 1910. . . . .	24 55		
		866 85	
Pilotage earnings undisbursed. . . . .		1,783 84	
			2,650 69

Approved,

RICHARD ALEXANDER,  
*Chairman.*

C. GARDINER JOHNSON,  
*Secretary.*



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## APPENDIX No. 30.

REPORT OF THE ANNAPOLIS ROYAL PORT WARDEN FOR THE YEAR  
ENDING DECEMBER 31, 1910.PORT OF ANNAPOLIS ROYAL, N.S.,  
JANUARY 6th, 1911.The Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I beg leave to hereby submit to you my report as Port Warden of the Port of Annapolis Royal, Nova Scotia, for the year ending Dec. 31st, 1910.

On August 8th, 1910, a survey was held on the four masted schooner *A. F. Davison*, finding as follows:—

Keel chafed, requiring two pieces, five and four feet respectively. Thirty feet shoe on forward end, and twenty six feet new shoe, on after end. Copper stripped off, caulked and re-coppered, rudder casing taken out, repaired and replaced, keelson refastened, pointers forward and aft refastened, iron knees re-riveted with three extra bolts in same, gasoline engine found strained, was repaired and replaced.

On Nov. 21st, a survey was held on the schooner *Archie Crowell*, finding as follows:—

Sternpost split at the bottom end, rudderport casing started, tree-nails at bilges started, seams and butts slack and open, keel shoe splintered, starboard anchor stock broken.

I ordered repairs as follows:—

Rudder to be unshipped and new piece scarfed on as may be found necessary, rudder casing to be repaired as found necessary. Slack tree-nails to be backed out and replaced with new ones. Vessel to be thoroughly re-caulked, keel shoe to be repaired where broken, a new anchor stock procured and shipped in place of broken one. Making the vessel in a good seaworthy condition.

Respectfully submitted.

JOSEPH MELANSON,  
*Port Warden.*

## APPENDIX No. 31.

REPORT OF THE PORT WARDEN AT CHATHAM, N.B., FOR THE YEAR  
ENDING DECEMBER 31, 1910.

CHATHAM, N.B., DECEMBER 27th, 1910.

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have not been called on to hold any surveys this year. The year was a very fine one, being free from any severe storm, in this vicinity.

Navigation closed here on the 5th of December.

I am, sir,

Your obedient servant,

GEORGE T. TAIT,  
*Port Warden.*



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## APPENDIX No. 32.

REPORT OF THE PORT WARDEN OF THE PORT OF HAWKESBURY,  
FOR THE YEAR ENDING DECEMBER 31, 1910.

HAWKESBURY, DECEMBER 31st, 1910.

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report of the doings of this office, with a statement of the fees collected by me, and also the attendant expenses during the past year.

I have the honour to be, sir,  
Your obedient servant,

NICHOLAS MARTIN,  
*Port Warden.*

Three surveys on schooner <i>Hattie C</i> . . . . .	\$38 00	
Three surveys on schooner <i>Hellen Shafner</i> . . . .	43 00	
Two surveys on schooner <i>Irven May</i> . . . . .	23 00	
One valuation survey. . . . .	6 00	
	<hr/>	\$110 00
Paid J. J. Hennesey, master mariner . . . . .	\$38 00	
William Duff, shipwright. . . . .	15 00	
John Lamey, sail maker. . . . .	5 00	
	<hr/>	\$ 58 00
Balance. . . . .		52 00
		<hr/>
		\$110 00
Amount reverting to Port Warden. . . . .		52 00

I hereby certify the above to be correct to the best of my knowledge and belief.

NICHOLAS MARTIN,  
*Port Warden.*



## APPENDIX No. 33.

REPORT OF MONCTON, N.B., PORT WARDEN, FOR THE YEAR ENDING  
DECEMBER 31, 1910.

MONCTON, N.B., DEC. 31st, 1910.

The Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—In pursuance of the provisions of Section 899, Chapter 113 of the Canadian Shipping Act, I beg to submit my annual return for the year 1910, as Port Warden for the port of Moncton, N.B.

I beg to report that I was only called upon to act in my official capacity on one occasion, viz.: to examine and report upon the condition of the tern schooner *Frances*, of Weymouth, N.S., from Barbadoes, W.I., to this port, which I did and certified accordingly.

The receipts of said office have been five dollars, and no expenses have been incurred.

I have the honour to be,

Sir,

Your obedient servant,

R. C. BACON,  
*Port Warden, Port of Moncton, N.B.*



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## APPENDIX No. 34.

REPORT OF THE PORT WARDEN AT HALIFAX, N.S., FOR THE YEAR  
ENDING DECEMBER 31, 1910.

HALIFAX, N.S., JANUARY 1st, 1911.

ALEX. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my report for the year ending December 31st, 1910, accompanied by a statement in duplicate of the receipts and expenditures during that period.

Surveys have been held on twelve steamers and three sailing vessels, which arrived at this port in a damaged condition during the year. The necessary repairs were made to the vessels, and those of them bound to other ports, proceeded to their destination where they have arrived safely.

The Bkt. C. R. C., of Jersey, stranded on the Gaspé coast, and taken off and brought to this port for repairs in the month of August, is remaining at this port awaiting settlement between underwriters and owners, before the necessary repairs are completed.

I have the honour to be,

Sir,

Your obedient servant,

NEIL HALL,  
*Port Warden.*

To the Deputy Minister of Marine and Fisheries,  
Ottawa.

RECEIPTS AND EXPENDITURES OF THE PORT WARDEN AT HALIFAX, N.S., FROM  
JANUARY 1ST, 1910, TO DECEMBER 31ST, 1910.

Date.	Dr.	Amount.	Date.	Cr.	Amount.
1910		\$ cts.	1910		\$ cts.
	To amount received as fees..	2,155 00		By paid assistants and office expenses, &c. ....	1,081 17
				By amount to port warden. . .	1,073 83
		2,155 00			2,155 00

I hereby certify that the above is a true and correct statement of the receipts and expenditures of the Port Warden at Halifax, N.S., from January 1st, 1910, to December 31st, 1910.

NEIL HALL,  
*Port Warden.*

SIR,—I have the honour to report that during the year ending December 31st, 1910, there has been shipped from the Port of Halifax to the port of Liverpool, Great Britain, 465,228 bushels of wheat.

No live stock has been shipped from Halifax during the year 1910.

NEIL HALL,  
*Port Warden.*



APPENDIX No. 35.

REPORT OF THE PORT WARDEN AT MONTREAL FOR THE YEAR  
ENDING DECEMBER 31, 1910.

MONTREAL, JANUARY 16th, 1911.

HONOURABLE L. P. BRODEUR,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour, by direction of the Council of this Board and in compliance with Section 31 of the Act governing the Port Warden Office, 45 Vic., Chap. 45, to transmit herewith, documents as follows:—

1. Port Warden’s annual report for the year 1910.

2. Audited statement of receipts and expenditures of the Port Warden office for the year ending December 31st, 1910.

3. Statement of investments of Port Warden Surplus funds.

I have the honour to be, sir,  
Your obedient servant,

GEO. HADRILL,  
Secretary.

STATEMENT OF THE INVESTMENTS OF THE SURPLUS FUNDS OF THE PORT WARDEN OFFICE AT  
MONTREAL, AND FOR INTEREST ACCRUING THEREFROM FOR THE YEAR ENDING 31ST  
DECEMBER, 1910.

Date.		Amount.	Per cent for 12 months	Interest.
		\$ cts.		\$ cts.
Feb. 16, 1880	Expended \$2,380.34 in purchase of Dominion Government stock. . . . .	2,300 00	3½	80 50
Aug. 16, 1880	Expended \$7,284.11 in purchase of city of Montreal registered stock, > \$7,000 00 . . . . .		5	175 00
			6 months	
Feb. 18, 1884	Expended \$5,031.34 in purchase of city of Montreal registered stock (coupon bonds Nos. 1720, 1721, 1722, 1723 and 1724, for \$1,000 each). . . . .	5,000 00	4	200 00
Mar. 14, 1887	Expended \$10,320.75 in purchase of city of Montreal consolidated fund stock. . . . .	10,000 00	4	400 00
Jan. 6, 1906	Expended \$10,000.00 in purchase of Montreal harbour bonds. . . . .	10,000 00	4	400 00
" 23, 1907	Expended \$4,000.00 in purchase of Montreal harbour bonds . . . . .	4,000 00	4	160 00
" 5, 1908	Expended \$3,090.00 in purchase of Montreal harbour bonds. . . . .	3,000 00	4	150 00
April 27, 1909	Expended \$4,090.00 in purchase of Montreal harbour bonds. . . . .	4,000 00	5	200 00
July 20, 1910*	Expended \$7,227.50 in purchase of Dominion cotton bonds. . . . .	7,000 00	6	189 86
			165 days	
	Loans to Montreal board of trade building fund. . . . .	70,000 00	4	2,800 00
			12 months	
	Total investments. . . . .	115,300 00	T'l. interest	4,755 36

\*Matured 1st July, 1910, and replaced by \$7,000.00 Dominion cotton bonds, purchased 20th July, 1910.

NORMAN WRIGHT,  
Treasurer, Montreal Board of Trade.

GEO. HADRILL,  
Secretary, Montreal Board of Trade.

MONTREAL, JANUARY 4th, 1911.



SESSIONAL PAPER No. 23

MONTREAL, 16th DECEMBER, 1910.

To the President and Council  
of the Montreal Board of Trade,  
City.

GENTLEMEN,—I have the honour to submit the annual report of the business of the Port Warden's Office with the statement of exports, receipts and expenditure for the year 1910.

Last year the river St. Lawrence was open early, namely, on the 19th April, when it was reported clear of ice to the sea, this was due to the government ice breaking steamers *Montcalm* and *Lady Grey*, breaking away the ice bridge at Cap Rouge, and clearing away the ice from Quebec to this port. This year the river and port were opened much earlier by the efforts of the government steamers, namely, on the 4th April, when the river St. Lawrence was officially reported open, and clear of ice to the sea. The harbour of Montreal was clear of ice and the Longueuil ferry commenced its regular service on the 1st April, 1910.

You will observe for the past two years, this port was open for navigation much earlier than heretofore, for which we are indebted to the government ice breaking steamers, and, providing the progress of the ocean steamers had not been obstructed by the gulf ice, they could have entered this port on the 4th April, 1910.

3rd April, government steamer, *Lady Grey* arrived in port.

10th April, 9 a.m., S.S. *Wobin*, collier, passed Quebec inward for Three Rivers.

11th April, 9 a.m., S.S. *Kronprins Olav* arrived at this port with a cargo of coal from Sydney, C.B.

21st April, S.S. *Lorle* arrived at this port with a cargo of coal from Philadelphia.

7 p.m., 26th April, the Thomson Line S.S. *Iona* arrived. This was the first transatlantic steamer to arrive this season.

We had one full rigged sailing ship here this year, the Norwegian ship *Sophie*, which loaded a part cargo of lumber for Bahia Blanca. This was the only foreign going sailing ship we have had in port this year.

The introduction of the wireless telegraph in the gulf, and the numerous signal stations on the river St. Lawrence have been of great advantage and help to shipmasters. Owing to the aid of the wireless telegraph the navigation of the Straits of Belle Isle, the shortest, and many consider the safest route, has been taken advantage of earlier than usual. On the 17th May, the S.S. *Manchester Mariner* passed through the Straits of Belle Isle, outward, having a clear passage and meeting little or no ice. This is, I think, the earliest on record.

This season is marked by the inauguration of a fast line of steamers between this port and Avonmouth. *The Royal Line*, registered at Toronto, and flying the Canadian flag, the Canadian Northern Railway Co's. steamship *Royal Edward* arrived here at 6.15 p.m., on the 19th May. This vessel and her sister ship, the *Royal George*, have kept up a regular fortnightly service during the season.

The passenger business, and the west bound or inward cargo business has been very good this season, but the outward or east bound cargoes and the cattle shipments have been poor.

With the exception of one steamship which took the ground in a dense rain squall in Cap a la Roche Channel, on the 10th of May, and sustained serious damage, the casualties between this port and Quebec have been slight.



The last ocean steamship to sail hence this season was the Elder Dempster Cos. S.S. *Bornu*, which arrived from Mexico with a full cargo on the night of the 26th November, loading a full cargo and sailed 1st Dec., passing out clear of Quebec the following day.

Three hundred and ninety-nine transatlantic or foreign-going vessels reported at this office, with a tonnage of 1,638,581 tons, against three hundred and sixty-seven vessels and 1,425,173 tons last season, an increase of 32 vessels and 213,408 tons.

The business to the lower ports this season consisted of:—Entered 333 vessels of all classes, with a tonnage of 570,705 tons, against 292 vessels and 468,422 tons, an increase of 41 vessels and 102,283 tons over last season.

Clearances of vessels loaded for the lower ports this season, 99 vessels of all classes, with a tonnage of 73,681 tons, against 109 vessels of 71,655 tons, a decrease of 10 vessels and an increase of 2,026 tons over last season.

The shipments of various kinds for the past season, manifested and reported at this office, are as per attached statement.

All of which is respectfully submitted.

ARCHIBALD REID,  
*Port Warden.*

COMPARATIVE STATEMENT OF SHIPMENTS, 1909 AND 1910, AS PER MANIFESTS REPORTED AT THE PORT WARDEN'S OFFICE.

Description.		1910	1909	1910	
				Increase.	Decrease.
Wheat.....	Bush.	20,423,775	25,277,128		4,853,353
Buckwheat.....	"	110,908	156,467		45,559
Peas....	"	38,006	57,910		19,904
Barley.....	"	486,929	493,846		6,917
Rye....	"		59,454		59,454
Oats.....	"	3,271,124	450,074	2,821,050	
Corn.....	"	2,708,307	424,481	2,283,826	
Flaxseed.....	"	135	157,905		157,770
		27,039,184	27,077,265	5,104,876	5,142,957 5,104,876
Total decrease for the year 1910. . .					38,081
Flour and meal.....	Bbls.	1,238,790	1,214,668	24,122	
Ashes.....	"	669	536	133	
Apples.....	"	157,283	549,739		392,456
Cheese.....	Boxes	1,888,679	1,874,237	14,442	
Butter.....	Pkgs.	29,540	39,626		10,086
Eggs. .	"		398		398
Box meats.....	"	181,302	229,855		48,553
Lard.....	"	411,621	412,860		1,239
Pulp.....	Tons.	6,023	12,296		6,273
Paper.....	"	16,992	14,709	2,283	
Sundries.....	"	86,929	61,463	25,466	
Hay.....	"	52,630	33,459	19,171	
Oilcake.....	"	26,716	23,324	3,392	
Minerals.....	"	14,341	12,863	1,478	
Lumber, Ft. board measure.....		109,076,306	110,008,619		932,313
Cattle.....	Head	72,686	94,268		21,582
Horses and mules.....	"	472	332	140	
Sheep.....	"	552	1,616		1,064



## SESSIONAL PAPER No. 23

## STATEMENT OF OVER SEA OR FOREIGN GOING VESSELS.

Description.	1910.		1909.	
	No.	Tons.	No.	Tons.
Steamers.....	398	1,636,960	364	1,423,293
Sailing vessels. ....	1	1,621	3	1,880
	399	1,638,581	367	1,425,173

Increase of 32 vessels and 213,408 tons.

## STATEMENT OF LOWER PORT ARRIVALS.

Description.	1910.		1909.	
	No.	Tons.	No.	Tons.
Steamers.....	297	567,338	263	465,523
Sailing vessels. ....	36	3,367	29	2,899
	333	570,705	292	468,422

Increase of 41 vessels and 102,283 tons.

## CLEARANCES FOR LOWER PORTS.

Description.	1910.		1909.	
	No.	Tons.	No.	Tons.
Steamers.....	77	71,601	86	69,342
Sailing vessels. ....	22	2,080	23	2,313
	99	73,681	109	71,655

Decrease of 10 vessels and increase of 2,026 tons.

Revenue, 1910.....	\$8,329 81
Revenue, 1909. ....	9,108 70
Decrease. ....	\$778 86



STATEMENT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING DECEMBER 31ST, 1910.

1909	Dr.	\$	cts	\$	cts.	1910.	Cr.	\$	cts.
Dec. 31	To balance cash in bank..... " in port warden's hands. Outstanding accounts, 1909 .....	7,549	00 108 99 11 40			Dec. 31.	By paid salaries:— Port wardens and staff..... Board of trade, secretarial expenses.. Rent, fuel and taxes..... Telephones, light, cleaning office, etc.. Lloyds' register and shipping papers.. Books, printing and stationery .....	9,499 94 1,000 00 320 72 221 76 38 07 107 40 19 50 98 25 100 00	
1910				7,669	39		Cab and carfares..... Miscellaneous expenses and carpets. . Alf. W. Hadrill, auditor. ....		
Dec. 31	To revenue derived as under:—  20,423,775 bushels wheat, 110,908 " buckwheat. 38,006 " peas. 846,929 " barley. 3,271,124 " oats. 2,708,307 " corn. 135 " flaxseed. 26,716 tons oilcake. 14,341 " minerals. 52,630 " hay. 73,158 head oxen, horses, mules. 552 " sheep. 669 bbls. ashes. 1,238,790 " flour and meal. 157,283 " apples. .... 242,001 tons sundries..... 109,076,306 feet sawn lumber ..						Treasurer, board of trade for invest- ment..... Balance, cash in bank..... Balance, cash in port warden's hands	9,150 23 105 56	11,405 64 7,227 50 9,255 79
	To port warden's fees (inwards)... port warden's fees (outwards)..... Special surveys..... Damaged cargo certificates.. ..	179 00 2,124 00 167 00 81 25							
				8,329	84				



1911	Treasurer, board of trade, cash for City of Montreal registered stock, matured 1st July, 1910. . . . .	169 91	7,000 00	
	Interest, bank account. . . . .	4,719 79		
	Interest, treasurer, board of trade. . .		4,889 70	
			27,888 93	27,888 93
Jan. 1	To balance. . . . .	9,255 79		

Audited and found correct.

ALF. W. HADRILL, Auditor.  
MONTREAL, JAN. 4th, 1911.

ARCHIBALD REID,  
Port Warden.



APPENDIX

PORT WARDEN'S REPORT OF

ALEX. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa, Ont.

SIR,—I have the honour to submit herewith, my annual report of the port

Date.	Vessel's Name.	Master's Name.	Register Tonnage.	Cargo.
1910.				
Jan. 6	S.S. <i>Germanicus</i> .	Bennet. . .	2,575	Steel rails.
April 28	<i>Meldon</i> . . . . .	Graves .	1,572	Sugar. . . . .
" 28	<i>Waverley</i> . .	Campe. . .	1,545	Deals. . . . .
May 2	<i>Belle of Scotland</i> .	Nutman. . .	3,207	Steel rails. . . . .
" 6	<i>Ulabrand</i> . . . . .	Kristiansen. . . . .	1,269	Pitch in bulk. . . . .
" 14	<i>Whitefield</i> .	Johns. . . . .	1,560	Deals. . . . .
June 1	<i>Arkansas</i>	Peterson. . . . .	2,351	" . . . . .
" 18	<i>Atlas</i> .	Jacobsen. . . . .	809	" . . . . .
July 6	<i>Bannockburn</i> . . .	Dent. . . . .	3,155	Steel rails. . . . .
" 2	<i>Enfield</i> . . . . .	Cradlock. . .	1,364	Deals. . . . .
" 11	<i>Ceylon</i> . . .	Wolden. . . . .	1,451	" . . . . .
" 14	<i>Atala</i> . . .	Griffiths. . . . .	2,040	Lumber. . . . .
Aug. 4	<i>Glenmount</i>	Peters. . . . .	1,246	Steel rails. . . . .
" 19	<i>Glenmount</i> .	Peters. . . . .	1,246	" . . . . .
" 22	<i>Platea</i> . . .	Starratt . . .	2,044	Deals. . . . .
" 25	<i>Arona</i> . . .	Mejlander. . . . .	1,862	" . . . . .
Sept. 10	<i>Crown of Navarre</i> . . . . .	McKillop. . . . .	1,762	" . . . . .
" 14	<i>Glenmount</i> . . . . .	Peters. . . . .	1,246	Steel rails. . . . .
" 17	<i>Rhauma</i> . . .	Hilt. . . . .	1,953	Lumber. . . . .
" 21	<i>Ben Cranchan</i> . . . . .	Rowsell. . . .	1,978	Deals. . . . .
Oct. 8	<i>Chronoa</i> . . .	Hatfield. . . . .	2,060	" . . . . .
Nov. 7	<i>Skogstad</i> . .	Rynning . . . .	2,357	Steel rails. . . . .
" 10	<i>Trym</i> . .	Anderson. . . .	1,138	Pitch in bulk. . . . .
" 25	<i>Minerva</i> . . .	Christophersen. . . . .	2,412	Steel rails. . . . .
Dec. 14	<i>Symra</i> . . . . .	Handeland . . . .	1,920	" . . . . .
" 21	<i>Fitzpatrick</i> . .	Huthingsor. . . .	2,834	" . . . . .
" 28	<i>Pennine Range</i> . . . . .	McGregor. . . .	2,214	Phosphate & cotton
" 31	<i>Felix</i> . . .	Olsen. . . . .	1,123	Pitch in bulk. . . . .
	28		52,296	tons.

I certify that the above is a true and correct account of the Port Warden's



SESSIONAL PAPER No. 23

No. 36.

INTERNATIONAL PIER.

SYDNEY, N.S., JANUARY 9th, 1911.

warden of International Pier, for the year ending December 31st, 1910.

Place from.	Place to.	DRAFT.				Free Board.	Mean Draft.		Amount		
		For-		Aft.			ft.	in.			
		ward.									
		ft.	in.	ft.	in.	ft.	in.	ft.	in.	\$	cts.
Sydney, N.S. . .	Prince Rupert, B.C.	24	0	24	0			24	0	8	00
Port Padra, Cuba.	Brow Head.	19	8	19	8	31	8½			8	00
St. John, N.B. . . .	Cork. . . . .	18	11	18	11	3	8			8	00
Sydney, N.S. . .	Prince Rupert, B.C. . . .	24	4½	24	4½	6	1			8	00
"	Antwerp. . . .	18	5	18	5			18	5	8	00
Nelson, N.B	Dublin.	20	6	20	10	2	7			8	00
St. John, N.B. . . . .	Brow Head.	21	8	21	8			21	8	8	00
Tormentine, N.B. . . .	Preston, Eng. . . . .	17	6	17	6			17	6	8	00
Sydney, N.S. . . . .	Prince Rupert, B.C. . . .	24	6	24	6	6	0			8	00
Pugwash, N.S. . . .	Brow Head. . . . .	18	9	18	11	3	0			8	00
Gaspe, Que. . . . .	Preston, Eng. . . . .	21	0	21	5			21	2½	8	00
Dalhousie, N.B. . . . .	Rosario, A.R. .	20	10	21	2½	5				8	00
Sydney, N.S. . . . .	Quebec. .	18	3	20	2	4	1			8	00
"	Chicoutimi, Que.	14	6	16	0	7	0			8	00
Chatham, N.B	Manchester. . . . .	20	3	21	1	4	8			8	00
"	Newry, Ireland. . . . .	20	7	20	7			20	7	8	00
New Richmond, Que. .	Belfast, Ireland. . . . .	21	0	21	0	4	4½	21	0	8	00
Sydney, N.S. . . . .	Quebec. .	18	3	20	2			4	1	8	00
Barrachois, Que. . . .	Montevideo. . . .	17	6	21	0			19	5	8	00
Chatham, N.B	Belfast. . . .	20	2	20	7	4	7			8	00
Newcastle, N.B.	Dublin.	20	3	20	7	4	10			8	00
Sydney, N.S. . . . .	Portland, Me. . . . .	21	1	21	1			21	1	8	00
"	Napola, Italy . . . . .	17	8	17	19			17	9	8	00
"	Portland, Me. . . . .	21	2	21	8			21	5	8	00
"	Portland, Me. . . . .	20	5	20	7			20	6	8	00
"	New Westminster, B.C	23	0	23	0	5	5			8	00
Port Arthur, Texas. .	Havre, France . . . . .	23	0	23	0	4	8			8	00
Sydney, N.S. . . . .	Brindise, Italy. . . .	18	4	18	4			4	8	8	00
										224	00

record for the year ending the 31st day of December, 1910.

NELSON H. TOWNSEND,  
Port Warden



1-2 GEORGE V., A. 1911

APPENDIX No. 37.

REPORT OF THE PORT WARDEN OF NANAIMO, B.C., FOR THE YEAR  
ENDING 31 DECEMBER, 1910.

JANUARY 3rd, 1911.

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report as Port Warden for the  
port of Nanaimo and Departure Bay.

Amount collected for surveys on vessels during the year 1910. . . . .	\$26 50
By amount paid for assistance and boat hire. . . . .	6 50
	<hr/>
Net balance. . . . .	\$20 00

I am, sir,  
Your obedient servant,  
  
J. S. KNARSTON,  
Port Warden.

APPENDIX No 38.

REPORT OF THE PORT WARDEN AT NORTH SYDNEY, N.S., FOR THE  
YEAR ENDING DECEMBER 31, 1910.

NORTH SYDNEY, DECEMBER 31st, 1911.

Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to send you my report for the year ending December  
31st, 1910.

*Ships Surveyed.*

S.S. *North Brilliant, Sok-oto, Bulega, Waucausta, Coaling, Sargasso. Crown of  
Sylisia, Hero, Magada, Crown of Castile, Saba, Canada Cape, Yola. Steam Trawler  
Eleite, S.S. Kirna, Spheroid, Berrin, Statia, Taff, Sargasso, Arnfrid, Valetta.  
Trawler Nordcaper, Trawler Belaine. S.S. Naparima, Spiral, Wacusta, Canada  
Cape, Burhaven, Parkhaven, Memmon, Youreba. Schooner J. B. Patten, Sarah  
L. Oxner.*

Money collected, \$340.00.

Yours respectfully,  
  
W. H. KELLY,  
Port Warden.



APPENDIX No. 39.

REPORT OF THE PORT WARDEN FOR PRINCE EDWARD ISLAND  
FOR THE YEAR ENDING DECEMBER 31, 1910.

PORT WARDEN'S OFFICE,  
PRINCE EDWARD ISLAND, DECEMBER 31st, 1910

SIR,—I have the honour to submit my annual report of the business of my office during the past year.

I am glad to report that the shipment of island produce has been more active than previous years, as we have had abundant crops throughout the island this year, and realizing good prices in provincial and foreign markets.

I am, sir,  
Your obedient servant,

H. P. WELSH.

To A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

RECEIPTS AND EXPENDITURE OF THE PORT WARDEN'S OFFICE, P. E. ISLAND, FOR YEAR  
ENDING DECEMBER 31ST, 1910.

Date.	Receipts.	Amount.	Date.	Expenditure.	Amount
1910		\$ cts.	1910		\$ cts
	To revenue derived from grain laden ships. . . . .	8 00		By expense of office . .	15 40
	Ships in distress. . . . .	58 00		Balance. . . . .	127 60
	Survey on hatches. . . . .	30 00			
	Other surveys. . . . .	47 00			
		143 00			143 00

I hereby certify the above to be a correct statement.

H. P. WELSH.

Charlottetown, P.E.I., Dec. 31st, 1910.



## APPENDIX No. 40.

REPORT OF THE QUEBEC PORT WARDEN, FOR THE YEAR ENDING  
DECEMBER 31, 1910.

QUEBEC, 31st DECEMBER, 1910.

A. JOHNSTON, Esq.,  
Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—As requested by the 30th section of the Port Warden's Rules, I beg respectfully to submit the following annual statement of the business transacted in this office during the year ending the 31st December, 1910.

Fifty steamers were surveyed for clearance outwards, after taking part cargo on board at this port, having previously shipped part cargo of grain and other goods at Montreal.

Forty-two steamers were surveyed, their hatches opened and cargo examined on their arrival from sea.

One steamer, one propeller, one barge, and one batteau were surveyed on account of collision damage.

Seven steamers and one schooner were surveyed on account of grounding and stranding in the river St. Lawrence, below and above Quebec.

One steamer was surveyed and value estimated for general average purpose.

Ten surveys were held on damaged goods in store, and on wharves.

The receipts and disbursements of this office are as follows:—

Receipts.....	\$1,241 75
Expenses. ....	272 00
	<hr/>
Balance. ....	\$969 75
	<hr/>

One steamer took live stock at Quebec, during the season, amounting to 256 cattle.

No fees were collected on above cattle.

I am,  
Your obedient servant,

ALEX. RUSSELL,  
*Port Warden.*



SESSIONAL PAPER No. 23

## APPENDIX No. 41.

REPORT OF THE PORT WARDEN OF ST. ANDREWS, N.B., FOR THE  
YEAR ENDING DECEMBER 31, 1910.

ST. ANDREWS, N.B., DECEMBER 31st, 1910.

To the Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I beg to submit my annual report for the year ending 31st December, 1910.

Jan. 24th, I surveyed dunnage in lower hold of schooner *Evolution*, from Elisabethport, with a cargo of fertilizers. Captain Baird, on inspection, found the vessel properly dunnaged and in every way attended to as generally done on the coast. A few sacks were found damaged round the pumps. The fees were \$2.50.

On February 9th, I surveyed the hatches of schooner *Laura C. Hall*, Captain Rockwell, from Boston, Mass., with a cargo of fertilizers. I found the hatches properly caulked and battened, and the cargo in good order. The fees were \$2.50.

March 15th, I surveyed the hatches of schooner *Alcoyne*, Captain Bishop, from Boston, with a cargo of fertilizers, and found the hatches properly caulked and battened. Receipts, \$2.50.

On April the 9th, I surveyed hatches of the schooner *P. G. McLauchlan*, Captain Dexter, direct from Boston, with a cargo of cement, and found her properly caulked, tarpaulined and battened. Receipts, \$2.50.

On June 16th, I surveyed the hatches of the schooner *Lady Smith*, Captain Ray, and found hatches and cargo in good condition. Fees, \$2.50.

On November 18th, I surveyed the hatches of the schooner *Blue Nose*, Captain McNamara, from Newark, loaded with fertilizers, and found hatches and cargo in good order. Fees, \$2.50.

On December 27th, I surveyed the hatches of the schooner *McLure*, from Boston, Mass., with a cargo of fertilizer. I found hatches and cargo in good order. Fees, \$2.50. Total fees, \$17.50.

I am, sir,

Your obedient servant,

JOHN WREN,  
Port Warden.



APPENDIX No. 42.

REPORT OF THE PORT WARDEN AT VICTORIA AND ESQUIMALT,  
B.C., FOR THE YEAR-ENDING DECEMBER 31, 1910.

VICTORIA, B.C., JANUARY 5th, 1910.

The Deputy Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour of submitting my report as port warden for the ports of Victoria and Esquimalt, B.C., for the year ending on the 31st of December, 1910.

Amount of fees received for surveys on hatches and cargoes. . . .	\$564 50
Fee for survey on hull of one vessel. . . . .	8 00
	<hr/>
Total amount of fees received. . . . .	\$572 50
	<hr/>

I have the honour to be, sir,  
Your obedient servant,

CHAS. E. CLARKE,  
*Port Warden.*



APPENDIX No. 43.

STATEMENT showing the result of returns of shipping and discharging of seamen, received by the Department of Marine and Fisheries, in accordance with the provisions of Chapter 113, 'An Act respecting Shipping in Canada,' from Shipping-Masters throughout the Dominion, for the half year ended June 30, 1910 and December 31, 1910.

NOTE.—The Collector of Customs acts as Shipping Master where no other Shipping Master is appointed.

QUEBEC.

Name of Port.	Name of County.	Name of Shipping-Master.	For half-year ended June 30, 1910.			For half-year ended December 31, 1910.			Total Seamen shipped.	Total Seamen discharged.	Total Amount.
			Seamen shipped.	Seamen discharged.	Amount.	Seamen shipped.	Seamen discharged.	Amount.			
					\$			cts.			\$
Escoumains.	Saguenay.	Charles J. Belanger.	Nil.	Nil.							
Gaspé.	Gaspé.	Frances G. Eden.	18		9 00	18					9 00
Magdalen Islands.	Gaspé.	Camille Delaney.	Nil.	Nil.							
Montreal.	Hochelaga.	William Cunningham.	535	429	396 20	2,754	1 034	1,687 20	3,289	1,463	2,083 40
Paspebiac.	Bonaventure.	P. C. Beauchesne.	10	12	8 60				10	12	8 60
Percé.	Gaspé.	No returns.									
Quebec.	Quebec.	F. Beland.	268	31	154 80	104	204	116 70	372	235	271 50
Rimouski.	Rimouski.	M. J. Lepage.	Nil.	Nil.							
St. John's.	St. John's.	G. Fredette.									
Three Rivers.	Three Rivers.	Alix. Houliston.	Nil.	Nil.							
								Total.	3,689	1,710	2,372 50

NEW BRUNSWICK.

Alma.	Albert.	D. C. Cleveland.	Nil.	Nil.		2	2	1 60	2	2	1 60
Barthurst.	Gloucester.	J. J. LeBlanc.	Nil.	Nil.							
Buctouche.	Kent.	No returns.									
Chatham.	Northumberland.	R. J. Walls.	5		2 50	20	13	13 90	25	13	16 40
Dallousie.	Restigouche.	George Haddow.	12	13	9 90	21	30	19 50	33	43	29 40
Dorchester.	Westmorland.	W. D. Wilber.	13	2	9 10	12	7	8 10	25	9	17 20



STATEMENT showing returns respecting Shipping and Discharging of Seamen, &c.

NEW BRUNSWICK—Continued

Name of Port.	Name of County.	Name of Shipping-Master.	For half-year ended June 30, 1910.			For half-year ended December 31, 1910.			Total Seamen shipped.	Total Seamen discharged.	Total Amount.
			Seamen shipped.	Seamen discharged.	Amount.	Seamen shipped.	Seamen discharged.	Amount.			
					\$ cts.			\$ cts.			\$ cts.
Fredrieton. . . . .	Westmorland. . .	No returns. . . . .									
Grand Harbour. . . .	Charlotte. . . . .	No returns. . . . .									
Harvey. . . . .	Albert. . . . .	No returns. . . . .									
Hillsborough. . . . .	Albert. . . . .	No returns. . . . .									
Lapreaux. . . . .	Charlotte. . . . .	J. E. Haggerty. . .					Nil.				
Moncton. . . . .	Westmorland. . .	G. H. O'chrane. . .	5	1	2 80				5	1	2 80
Musquash. . . . .	St. John. . . . .	No returns. . . . .									
New Brandon. . . . .	Gloucester. . . . .	No returns. . . . .									
Newcastle. . . . .	Northumberland. .	No returns. . . . .									
Quaco. . . . .	St. John. . . . .	No returns. . . . .	1	1	80		Nil.		1	1	80
Riverside. . . . .	Albert. . . . .	Charles Morris. . .									
Rockport. . . . .	Westmorland. . .	No returns. . . . .									
Sackville. . . . .	Westmorland. . .	No returns. . . . .									
St. Andrews. . . . .	Charlotte. . . . .	W. Snodgrass. . . .				3	3	75	3	3	75
St. George. . . . .	Charlotte. . . . .	James McKiv. . . .	Nil.	Nil.	615 10	834	384	532 20	1,853	736	1,147 30
St. John. . . . .	St. John. . . . .	W. H. Purdy. . . .	1,019	352							
Shediac. . . . .	Westmorland. . .	A. M. Leger. . . . .	Nil.	Nil.							
Shippigan. . . . .	Gloucester. . . . .	Edward D. Chaisson. .	Nil.	Nil.							
St. Martins. . . . .	St. John. . . . .	J. R. McDonough. . .	26	6	14 80	16	29	16 70	42	35	31 50
St. Stephen. . . . .	Charlotte. . . . .	H. Graham. . . . .	Nil.	Nil.		6	5	4 50	6	5	4 50
								Total. .	1,985	850	1,256 25

NOVA SCOTIA.

Advocate Harbour. . .	Cumberland. . . . .	William Moore. . . .	Nil.	Nil.		6	9	5 70	6	9	5 70
Amberst. . . . .	Cumberland. . . . .	B. W. Baker. . . . .	4	6	3 80		9	2 70	4	15	6 50
Annapolis. . . . .	Annapolis. . . . .	Thos. M. Buckler. . .	69	33	44 40				69	33	44 40
Antigonish. . . . .	Antigon sh. . . . .	A. Boyd. . . . .				Nil.	Nil.				
Apple River. . . . .	Cumberland. . . . .	H. H. Mosher. . . . .				14	14	11 20	14	14	11 20







STATEMENT showing returns respecting Shipping and Discharging of Seamen, &c.  
NOVA SCOTIA—Continued.

Name of Port.	Name of County.	Name of Shipping-Master.	For half-year ended June 30 1910.			For half-year ended December 31, 1910.			Total Seamen shipped.	Total Seamen dis- charged.	Total Amount.
			Seamen shipped.	Seamen dis- charged.	Amount. \$ cts.	Seamen shipped.	Seamen dis- charged.	Amount. \$ cts.			
Port Gravelle. . . .	Cumberland. . .	J. M. Bentley. . .	48	51	39 30	37	43	31 40	85	94	70 70
Port Hawkesbury. . .	Inverness. . .	James McLane. . .	8	19	9 70	10	8	7 40	18	27	17 10
Port Hastings. . . .	Inverness. . .	George L. McLean. .	4	2	2 60	17	20	14 50	21	22	17 10
Port Hood. . . . .	Inverness. . .	E. D. Tremain. . . .	1	. . .	50	. . .	. . .	. . .	1	. . .	50
Port la Tour. . . . .	Shelburne. . . .	Benj. R. Smith. . . .	. . .	. . .	. . . . .	Nil.	Nil.	. . . . .	. . .	. . .	. . .
Port Lorne. . . . .	Annapolis. . . .	No returns. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Port Mulgrave. . . . .	Guy's-borough. . .	Michael J. Keating. . .	. . .	. . .	. . . . .	22	21	17 30	22	21	17 30
Port Lorne. . . . .	Annapolis. . . .	No returns. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Port Melway. . . . .	Queens. . . . .	L. M. Letson. . . . .	Nil.	Nil.	Nil.	Nil.	. . .	. . . . .	. . .	. . .	. . .
Port Morien. . . . .	Cape Breton. . .	Joseph Orr. . . . .	Nil.	Nil.	. . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Port Williams. . . . .	Kings. . . . .	J. R. Starr. . . . .	Nil.	2	60	. . .	. . .	. . . . .	. . .	2	60
Port Wade. . . . .	Annapolis. . . .	E. H. Porter. . . . .	4	. . .	2 00	4	4	3 20	8	4	5 20
Pubnico. . . . .	Yarmouth. . . .	W. H. Amiro. . . . .	Nil.	Nil.	. . .	6	1	1 80	6	1	1 80
Pugwash. . . . .	Cumberland. . . .	No returns. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
River Hebert. . . . .	Cumberland. . . .	A. W. Pugsley. . . . .	4	2	2 60	. . .	. . .	. . . . .	4	2	2 60
*Riverport. . . . .	Lunenburg. . . .	Stephen Roitcey. . . .	1	1	28 30	14	13	10 90	15	14	39 20
St. Anns. . . . .	Victoria . . . . .	Alexander McLeod. . . .	Nil.	Nil.	. . . . .	Nil.	Nil.	. . . . .	. . .	. . .	. . .
St. Peters . . . . .	Richmond . . . .	E. M. Morrison . . . .	32	Nil.	16 00	29	5	16 00	61	5	32 00
Salmon River. . . . .	Digby. . . . .	Ed. Doucette. . . . .	4	. . .	2 00	4	4	3 20	8	4	5 20
Sheet Harbour. . . . .	Halifax. . . . .	Thos. H. Hall. . . . .	. . .	. . .	. . . . .	Nil.	Nil.	. . . . .	. . .	. . .	. . .
Shelburne . . . . .	Shelburne. . . .	W. W. Atwood. . . . .	7	. . .	3 50	20	23	16 90	27	23	20 40
Sydney. . . . .	Sydney. . . . .	James Rudderham. . . .	123	107	93 60	270	276	217 50	393	383	311 10
Thorne's Cove. . . . .	Annapolis. . . .	No returns. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Turo. . . . .	Colchester. . . .	No returns. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Tatamagouche. . . . .	Colchester. . . .	James Ramsay. . . . .	. . .	. . .	. . . . .	Nil.	Nil.	. . . . .	. . .	. . .	. . .
Wallace. . . . .	Cumberland. . . .	No returns. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Walton. . . . .	Hants. . . . .	H. Woolaver. . . . .	5	4	3 70	9	6	6 30	14	10	10 00
West Aichat. . . . .	Richmond . . . .	No returns. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Weymouth. . . . .	Digby. . . . .	A. H. Brooks. . . . .	21	15	15 00	35	14	21 70	56	29	36 70
Windsor. . . . .	Hants. . . . .	William O'Brien. . . . .	17	3	9 40	. . .	. . .	. . . . .	17	3	9 40
Wolfville. . . . .	Kings. . . . .	C. R. Bill. . . . .	Nil.	Nil.	. . . . .	. . .	. . .	. . . . .	. . .	. . .	. . .
Yarmouth. . . . .	Yarmouth . . . .	N. L. Trefry. . . . .	466	330	332 00	408	501	354 30	874	831	686 30
								Total. . . .	8, 572	6,130	5,838 40

† Special rates are given to fishermen.      \* 11 fishing vessels at \$2.50 each.      ‡ Report sent in for the year.



SESSIONAL PAPER No. 23.

PRINCE EDWARD ISLAND

Alberton.	Prince.	James F. White.	4	17	2 00		1	30	4	1	2 30
Charlottetown.	Queens.	F. Beers.	116		63 10	68	16	62 80	181	33	125 90
Crapaud.	Queens.	Robert McDonald.	3	nil.	1 50	13	1	7 70	16	4	9 20
Georgetown.	Kings.	Charles Owen.	15		7 50	Nil.	Nil.		15		7 50
Malpeque.	Prince.	James McK. McGougan.	Nil.	Nil.							
Murray Harbour.	Queens.	H. J. Berhaut.	Nil.	Nil.		Nil.	Nil.				
Pinette.	Queens.	No returns.									
Port Hill.	Prince.	W. J. Montgomery.	Nil.	Nil.							
St. Peter's.	Kings.	Chas. Wayne.	Nil	Nil.							
Souris.	Kings.	Arch. Currie.	5	Nil.	2 50				5		2 50
Summerside.	Prince.	No returns.									
Tignish.	Prince	A. T. Gaudet.				Nil.	Nil.				
Montague.	Kings.	S. Mutch.	6	Nil. 0	3 00	8	6	5 80	14	6	8 80
								Total..	238	44	156 20

BRITISH COLUMBIA.

Aboucet.	Vancouver.	No returns.					28	8 40	27	28	21 90
Clayoquot.	Comox-Atlin.	John Grece.	27		13 50						
Hesquait.	Vancouver.	No returns.									
Kynoquot.	Comox.	Amos Elis.	22		11 00		16	4 80	22	16	15 80
Masset Inlet.	Queen Charlotte.	C. Harrison.	Nil.	Nil.		Nil.	Nil.				
New Westminster.	New Westminster.	J. B. Campbell.				1,229	1,143	1,145 60	1,229	1,143	1,145 60
Victoria.	Victoria	Geo. Kirkendale.	201	238	171 90	1,100	1,052	865 60	1,301	1,290	1,037 50
Vancouver.	New Westminster.	John B. Campbell.	1,466	1,112	1,240 20	1,229	1,143	1,145 60	2,695	2,255	2,385 80
								Total..	5,274	4,732	\$4,606 60



1-2 GEORGE V., A. 1911

Statement showing returns respecting Shipping and Discharging of Seamen, etc.  
RECAPITULATION.

	Total Seamen Shipped.	Total Seamen Discharged.	Total Amount of Fees Collected.
			\$ cts.
Quebec.....	3,689	1,710	2,372 50
New Brunswick.....	1,985	850	1,256 25
Nova Scotia.....	8,572	6,130	5,838 40
Prince Edward Island...	238	44	156 20
British Columbia.....	5,274	4,732	4,606 60
Totals.....	19,758	13,466	\$14,229 95







APPENDIX

STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve  
SEA-GOING

Date of Casualty	Name of Ship.	Age of ship.  Yrs	Port of Registry.	How Rigged. — Iron or wood. — Steam or Sailing.	Register Tonnage.
1909.					
Dec. 26	A. K. Maclean. (116,539)	5	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	176
Dec. 29	A. W. Perry . . . (106,075)	12	Halifax, N.S. . . . .	Schr., steel, steam. . . . .	957
1910.					
Mar. 10	A. W. Perry. . . . . (106,075)	13	Halifax, N.S. . . . .	Schr., steel, steam. . . . .	957
1909.					
Oct. 15	Acacia. . . . . (92,625)	22	Barrington, N.S. . . . .	Schr., wood, sail. . . . .	98
1910.					
May 24	Acadian. . . . . (83,431)	29	Weymouth, N.S. . . . .	Schr., wood, sail. . . . .	32
1909.					
Sept. 10	Ada Mildred. . . . (107,961)	9	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	99
1908					
Jan. 20	Ada Mildred. . . . (107,961)	8	Pictou, N.S. . . . .	Schr., wood, sail. . . . .	99
1910.					
Jan. 18	Agnes. . . . . (U.S.A.)	10	Gloucester, Mass., U.S.A. . . . .	Schr., wood, sail. . . . .	75
1909.					
Oct. 29	Akerhus. . . . .	2	Norwegian. . . . .	None, steel, steam. . . . .	1,671
1910.					
Feb. 16	Alaska. . . . . (77,897)	26	Sackville, N.B. . . . .	Schr., wood, sail. . . . .	118
1909.					
Nov. 12	Albani. . . . . (112,326)	7	Liverpool, N.S. . . . .	Schr., wood, sail. . . . .	249
1910.					
Mar. 20	Alberni. . . . . (126,072)	2	Vancouver, B.C. . . . .	Sloop, wood, steam. . . . .	19
May 4	Aleyone. . . . .		Booth Bay, Me., U.S.A. . . . .	Schr., wood, sail. . . . .	97
1909.					
Nov. 12	Alexandra . . . . . (107,608)	8	Weymouth, N.S. . . . .	Schr., wood, s il. . . . .	178
Oct. 22	Alkaline. . . . . (103,731)	12	Parrsboro, N.S. . . . .	Bque., wood. sail. . . . .	626



## SESSIONAL PAPER No. 23

## No. 44.

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.

## WRECKS.

Port sailed from — Port bound to.	Place where casualty happened.	Nature and cause of casualty. .	Lives lost and saved.	Remarks.
				\$
New York, U.S.A., Perth Am- boy, Halifax, N.S.	Vineyard Haven, Mass., U.S.A.	Stranded. Master, F. Remby.		Part 3,500.
Halifax, N.S., Boston, Mass., U.S.A.,	Georges Isld., Halifax Har- bour, N.S.	Stranded.		No damage.
Halifax, N.S., Boston, Mass., U.S.A.	Boston, Mass., Harbour.	Collision with water boat <i>Jennie</i> . Master, F. C. Hows.		
New York, U.S.A., Clarke's Harbour, N.S.	Clarke's Harbour, N.S. . . . .	Stranded. Master, J. E. Brown.		Total 800.
Meteghan, N.S., Pubnico, N.S., Meteghan, N.S.	St. Mary's Bay, N.S., Bay of Fundy.	Capsized. . . . .		Total 600.
St. Martin, W.I., La Have, N.S.	Lat. 20° 23' N., Long. 63° 38' W., Caribbean Sea.	Sprung a leak. . . . .		Part 400.
Sherbrooke, N.S., Louisburg, N.S.	Near White Head, N.S. . . . .	Stranded. . . . .		Total 5,000.
Gloucester, Mass., U.S.A., Fishing Banks.	25 miles west of Cape Sable Island, Bay of Fundy.	Lost fore-mast and damaged by gale. Master, Ernest Engstrom.		Part 350.
Queenboro, Clark City, Que. . .	Seven Islands Bay, Gulf St. Lawrence.	Stranded. . . . .		No damage.
St. John, N.B., New Haven, Conn.	Deer Island, Me., U.S.A. . . . .	Run into by Schooner <i>P. J.</i> <i>McLaughlin</i> .		Part 500.
Trinidad, W.I., Philadelphia, U.S.A.	Lat. 21° 20' N., Long. 67° 29' W., N. Atlantic.	Broke spars and lost sails in hurricane. Master, E. B. Nickerson.		
Vancouver, B.C., Secret Cove, Vancouver, B.C.	Pt. Atkinson, Lt. bearing N. E. 1½, Gulf of Georgia.	Damaged by collision with <i>SS. Canada</i> . Master, W. Best		Part.
Booth Bay, Me., Halifax, N.S., Eastport, Me., U.S.A.	Amherst, Magdalen Isl., Que., Gulf St. Lawrence.	Foundered.		Part.
Weymouth, N.S., Ponce, Turks Island.	East Harbour, Long Key, Turks Island.	Stranded. Master, Pothier. . .		Total 6,500.
Oporto, Turks Island. . . . .	90 miles S. W. by W., from Oporto, Atlantic Ocean.	Damaged in collision with un- known steamer.		Part.



STATEMENT of wrecks and casualties reported as having occurred to British;  
going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage.
1910.		Yrs			
Feb. 21	Albion (95,520)	20	Hartlepool, G.B.	Schr., steel, steam. . . . .	1,824
May 12	Amelia (104,069)	16	Magdalen Islands, Que .	Schr., steel, steam.	103
1909.					
April 21	Amur (98,073)	19	Victoria, B.C. .	Schr., iron, steam	570
Oct. 28	Amur (98,073)	19	Victoria, B.C.	Schr., steel, steam	570
Oct. 25	Annie L. Banks (122,319)	1½	Bridgetown, Bar'd'os. . . . .	Schr., wood, sail	135
1910.					
June 5.	Antoinette (Eugene)		(French). .	Schr., wood, sail.	11
June 28	Aotea (104,047)	15	Southampton, G.B.	Schr., steel, steam.	3,647
1909.					
Nov. 16.	Arctura (94,778)	20	Lunenburg, N.S.	Schr., wood, sail.	84
July --.	Arizona	27	Norwegian. .	Bk., wood, sail. .	1,030
Nov. 11	Arctura	8	Gloucester, Mass., U.S.A. . .	Schr., wood, sail.	97
1910.					
Mar. 23	Arthur B. . . (126,735)	12	Vancouver, B.C. . .	Sloop, wood, gasoline. . .	92
April 19	Arthur M. Gibson . . (96,947)	20	Bridgetown, Bar'd's	Schr., wood, sail.	296
May 25.	Astarte. . . . . (128,253)	1	Glasgow, G.B. . . . .	F. & A., steel, steam	717
Feb. 26.	Athena. . (92,948)	22	Windsor, N.S. .	Bgtn., wood, sail. .	663
June 3	Atlanta. .	16	Gloucester, Mass., U.S.A. . .	Schr., wood, sail. . . . .	74
1909.					
Dec. 14.	Barcelona (103,510).	13	Lunenburg, N.S. .	Schr., wood, sail.	99
1910.					
Mar. 15	Battle . (111,900)	4	Weymouth, N.S.	Schr., wood, sail. . . . .	158
May 25	Beacon Bar . . (126,711)		St. John, N.B. . . . .	None, wood, sail. . . . .	197
April 6	Beatrice S. Mack (116,498)	6	Lunenburg, N.S.	Schr., wood, sail. .	99
May 18	Beaver. (100,056)	20	St. John, N.B.	Schr., wood, sail	192
April 12	Belle of Scotland (124,030)	3	Liverpool, G.B.	Steel, steam	3,207



## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks.
Liverpool, G.B., Halifax, N.S., St. John's, Newfoundland.	Fairway Buoy, Halifax, N.S.	H. P. cylinder cover fractured.		Part 700.
Halifax, N.S., St. John, N.B.	Entrance to Lunenburg Har- bour, N.S.	Stranded. Master, M. B. Wrayton.		Part 500.
Victoria, B.C., Metlakatla, B.C. Port Simpson, B.C.	Metlakatla Harbour, B.C. . . .	Stranded . . . . .		Part 2,355.
Victoria, B.C., Skidegate, B.C.	Lat. 53° 19' N., Long. 131° 41' W., Hecate Strait.	Struck uncharted rock. . . . .		Part 14,000.
Stonehaven, N.B., Boston, Mass. U.S.A.	12 miles north Sea Wolf Isld., Gulf St. Lawrence.	Lost two boats and sails dam- aged Master, Haughn.		Part 500.
St. Pierre, Miq., Magdalen Islds., Fishing grounds.	Etang du Nord, Mag. Islds., Que., Gulf St. Lawrence.	Stranded. . . . .		Total.
London, G.B., Shields, G.B., Montreal, Que.	Lat. 49° 15' N., Long. 69° 49', Gulf St. Lawrence.	Stranded		Part.
Halifax, N.S., St. Peters, C.B.	Black Point, Grand River, Richmond Co., N.S.	Stranded		Total 1,200.
Kraigso, Norway, Northport, N.S., Manchester, G.B.	50 miles N. E. of Ingonish, C.B., N. Atlantic.	Abandoned at sea, leaky and Fired. Mast., F. Gunderson.		Total 10,000.
Gloucester, Mass., Fishing. . . .	25 miles S. W. Virgin Rocks, Nfld. Banks, Atlantic ocean	Lost dories and gear in hur- ricane. Master, Wharton.		Part 310.
Vancouver, B.C., Tacoma, Wash., Vancouver, B.C.	Off Sands Heads, Fraser river, B.C.	Foundered. . . . .	5	Total 6,000. 1,500
Port Johnson, N.J., U.S.A., St. John, N.B.	Six miles S. W. of Partridge Island Bar, Bay of Fundy.	Struck Negro Head, Rip. Master, J. E. Howard.	3	Part 1,000.
Glasgow, B.G., Halifax, N.S., Port Hood, N.S.	South end Straits of Canso, N.S.	Stranded. Master, John Young.		Part.
Gulf Port, U.S.A., Kingston, Jamaica.	Kingston, Jamaica, Caribbean Sea.	Slight grounding forward when in Stays.		
Gloucester, Mass., U.S.A., Fishing ground.	Off Pubnico, N.S. . . . .	Sprung a leak and put into Halifax		Part 600.
Sheet Harbour, N.S., New York, U.S.A.	40 miles E. & N. from Cape Cod, U.S.A.	Lost an anchor, boat & part of deckload. Master Alonzo Oakes.		Part 170.
Ponce, Porto Rico, Turks Island.	Lat. 21° 33' N., Long. 70° 38' W., Caribbean Sea.	Sprung a Leak.		
Dredging at Beacon Bar, St. John Harbour, N.B.		Collision with a Scow. . . . .		Part 1,000.
Lunenburg, N.S., Canso, N.S.	Hounds Ledge, near Cross Island, Lunenburg Harbour	Stranded. . . . .		Part 450.
Gaspé, Que., New York, U.S.A.	Gulf of St. Lawrence . . . . .	Struck raft of logs in channel. Master, E. Pettipas.		Part 200.
Newcastle-on-Tyne, G.B., Syd- ney, C.B.	North Atlantic. . . . .	Stranded in very heavy weather. Master, W. J. Nutman.		Part.



1-2 GEORGE V., A. 1911

STATEMENT of wrecks and casualties reported as having occurred to British, going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage
1909.		Yrs			
Nov. 13	Belmont. (83,432)	23	Lunenburg, N.S. . . . .	Schr., wood, sail. . . .	98
1910.					
May 31.	Ben Cruachan. . . . (114,516)	8	North Shields, G.B. . . . .	Steel, steam. . . . .	1,977
April 30	Ben Lomond. . . . (122,863)	3	Newcastle, G.B. . . . .	Schr., steel, steam. . .	1,795
Jan. 4.	Bessie Dollar. . . . (121,272)	4	Victoria, B.C. . . . .	Schr., steel steam. . . .	2,798
1909.					
Oct. 31.	Blanche. . . . .	10	Gloucester, Mass., U.S.A. . . . .	Schr., wood, sail. . .	78
	Bluenose. . . . . (112,062)	6	Windsor, N.S. . . . .	Schr., wood, sail. . .	166
July 26.	Bonavista. . . . . (87,966)	25	Montreal, Que. . . . .	Schr., iron, steam.	837
1908.					
Oct. 13.	Bonnie Lin. . . . . (107,053)	9	Barrington, N.S. . . . .	Schr., wood, sail. . .	10
1910.					
June 1.	Borghild. . . . .	34	Fredrikshald, Norway . . . . .	Bk., wood, sail. . . . .	725
1909.					
July 7.	Bravo . . . . . (103,497)	14	Paspebiac, Que . . . . .	Tern schr., wood, sail . . .	47
	Brodick Castle. . . . . (71,743)	34	Victoria, B.C. . . . .	Ship, iron, sail. . .	1,770
Feb. 18.	C. P. N. No. 1. . . . (100,508)	22	Victoria, B.C. . . . .	None, wood, sail	91
Oct. 25.	C. B. Whidden. . . . . (111,698)	8	Liverpool, N.S. . . . .	Bktn., wood, sail. . .	349
July 12.	C. B. Wood. . . . .	42	Boston, Mass., U.S.A. . . . .	Schr., wood, sail. . .	224
July 26.	Cairnerag. . . . . (101,812)	17	Newcastle, G.B. . . . .	Schr., steel, steam.	1,951
July 8.	Caledonia. . . . . (116,587)	5	Liverpool, N.S. . . . .	Tern schr., wood, sail. . . .	188
Nov. 20.	Caledonia. . . . . (116,587)	6	Liverpool, N.S. . . . .	Schr., wood, sail. . .	188
Nov. 27.	Canada . . . . . (111,772)	9	Vancouver, B.C. . . . .	Barge, wood, sail. . . . .	304
Oct. 26.	Canadienne. . . . . (73,495)	26	Halifax, N.S. . . . .	Schr., wood, sail. . .	53
Oct. 10.	Carrie. . . . . (97,081)	19	Lunenburg, N.S. . . . .	Schr., wood, sail. . .	99
1910.					
Jan. 9.	Cassiar. . . . . (103,472)	9	Vancouver, B.C. . . . .	Sloop, Wood, steam. . . . .	384



## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks
				\$
North Sydney, Cape Negro, Pubnico, N.S.	Barrington Passage, N.S., N. Atlantic.	Stranding. Master, W. D. Pearl.		Total (s) 2,500 (c) 600
Cardiff, G.B., Baltimore, U.S.A. Miramichi, N.S.	Kelty Cove, C.B., N.S. . . . .	Stranding. Master, O. Rowsell		Part.
Lying at Parrsboro Roads, N.S., loading.		Collision with a lumber scow. . .		Part 100.
San Francisco, Hoqueain,	2½ miles below Hoqueain. . . .	Stranded. Master, Alex. Gow.		Trifling.
Gloucester, Mass., Banks, Fish- ing.	N. entrance to Canso Harbour N.S.	Stranded.		Part 300.
New York, U.S.A., Windsor, N.S.	Opposite 52 St., North River, New York.	Collision with a ferry boat. . .		Part 370.
Montreal, Que., Sydney, N.S., St. Johns, Que.	25 miles S. W. Cape St. Mary's Newfoundland.	Collision with iceburg. Mast., D. C. Fraser.		No damage
Yarmouth, N.S., Grand Har- bour, Yarmouth, N.S.	15 miles west of Brice Island, Bay of Fundy.	Foundered. . . . .		Total 600.
Freirekshald, Jeddore, N.S. .	Castor Ledges, near Becker- ton, N.S.	Stranded in fog . . . . .	2	Total loss.
Gaspé, Que., Port Hawkesbury Barbados.	Lat. 37° 15' N., Long. 59° W., N. Atlantic.	Damaged in hurricane. Mas- ter, T. H. Giffin.		Part.
Portland, Ore., Astoria, Ore., Queenstown	Pacific Ocean. . . . .	Missing.	20	Total.
Victoria, B.C., Ladysmith, B.C.	Cadbara, Pt. bearing, S. W. dist., ¼ mile B.C. waters.	Stranding. . . . .		Total 500.
North Sydney, N.S., St. John's, Newfoundland.	Marine Head, St. Mary's Bay, Newfoundland.	Stranding. . . . .		Total 14,000.
Boston, Mass., St. John, N.B. .	Partridge Island, St. John, N.B.	Stranding. . . . .		Total 2,500.
Newcastle-on-Tyne, Boston, Mass., Bathurst, N.B.	Snorting Rocks, Big Dover Island, N.S., N. Atlantic.	Stranding. Master, James Hyslop.		Total.
Antigua, Boston, Mass. . . . .	Lat. 35° 58' N., Long. 68° 40' W., N. Atlantic.	Heavy sea smashed water cask and two puncheons molasses.		Part 50.
Belize, B.H., Stamford, Conn.	W. by S. 20 miles from Cape Hatteras, Atlantic Ocean.	Damaged in gale and lost part of deck cargo.		Part 1,900.
Victoria, B.C., Vancouver, B.C.	English Bay, Buoy, B.C. . . . .	Stranded.		Total 6,000.
North Sydney, N.S., St. Paul's Island.	N E end of St. Paul's Island, Atlantic Ocean.	Stranded.		Total 1,000
Sydney, N.S., Charlottetown, P.E.I.	Ship Rock, Strait of Canso, N.S.	Stranded.		Slight
Simeon Sound, Rock Point, Vancouver.	Lat. 57° 17' 45" N., Long. 125° 17' W., Ohio Hollow Chan- nel, B.C.	Stranded.		Part 1,500



1-2 GEORGE V., A. 1911

STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve

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## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian seaports ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved	Remarks
				\$
Port Harvey, Van Anda, Vancouver, B.C.	Lat. 49° 17' N., Long. 123° 11' W., First Narrows, Burrard Inlet, B.C.	Stranded.		Part 750
Liverpool, N.S., San Blas.	Lat. 17° 19' N., Long. 80° 30' W., Caribbean Sea.	Damaged at sea, towed into Belize, B.H., & condemned.		Total 9,000
St. John, N.B., Centreville, N.S.	Centreville, N.S., Bay of Fundy.	Stranded.		Part 1,050
St. Martin, Lunenburg.	35 miles N. N. W. of Sombiero Light, Caribbean Sea.	Damaged by heavy weather, put into St. Thomas for repairs.		Part.
St. John's, Nfld., Barbados.	Lat. 38° 50' N., Long. 63° 30' W., N. Atlantic.	Lost sails and leaking. ....		Part 2,200
St. Martin's Bay, N.S., New York.	Vessel reported at Vineyard Haven, 18th Jan., 1910.	Lost boat, fore boom, and part of deckload of lath.		
Queen's Reach, Jervis Inlet, Vancouver, B.C.	Lat. 49° 52' 20" N., Long. 124° 4' 30" W., Hotham Sound Jervis Inlet.	Struck a rock. Master, J. Brown.		Part 1,200
Pascagoula, Rio de Janiero.	Lat. 30° 14' N., Long. 88° 35' W., Mississippi Sound.	Stranded.		Unknown
Vancouver, Prince Rupert, B.C., Stewart, B.C.	Venn Passage, 54° 19' N., 130° 24' W., Pr. Rupert Harbour.	Ran on unchartered rock. Master, J. F. Edwards.		No damage
St. John, N.B., Halifax, N.S., Havre, France.	N. W. corner of Gorges Isld., Halifax Harbour.	Stranded. Master, A. Rennie.		Trifling
Great Village, N.S., Salem, Mass.	Off Port Grevelle, Minas Channel, Bay of Fundy.	Lost spars and sails in squall. Master, J. M. Huntley.		Part 150
Glasgow, G.B., Quebec, Que., Montreal, Que.	Cap la Roch Channel, St. Lawrence River.	Touched bottom in Channel. Master, Alex. Smith.		Part
Chemainus, B.C., East Point, B.C.	Lumber Passage, B.C. ....	Stranded. Mast., Anderson.		Total 5,000
New York, Windsor, N.S. ....	100 miles S. W. of Yarmouth, Bay of Fundy.	Broke tail shaft. ....		Part 350.
Murray River, P.E.I., St. Pierre, Miq.	40 miles E. of Seattarie, N.S., N. Atlantic.	Main masthead carried away		Part 200
Liverpool, G.B., Quebec, Que., Montreal, Que.	Cap a la Roche River, St. Lawrence.	Stranded. Master, Menders.		Slight damage
Gloucester, Mass., Fishing. ...	Canso Harbour, N.S. ....	Stranded. ....		Total (s) 6,000 (c) 2,000
Paspebiac, Que., Port Hawkesbury, N.S., Barbados.	Lat. 40° 10' N., Long. 60° 50', N. Atlantic.	Stranded at sea.		Total (s) 6,000 (c) 3,000



STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship.  Yrs	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage.
1910.					
Jan. 24.	Earl Grey. . . . (116,904)	4	Parrsboro, N.S. . . . .	Schr., wood, sail. . . . .	379
Feb 11.	Earl Grey. . . . (116,904)	4	Parrsboro, N.S. . . . .	Schr., wood, sail. . . . .	379
May 4.	Ellen. . . . .	3	Christiania, Norway. . . .	Schr., steel, steam. . . . .	247
Jan. 6.	Ellen L. Maxner. (107,127)	11	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	93
1909.					
Nov. 30.	Empress. (107,761)	8	Charlottetown, P.E.I. . . . .	Schr., wood, sail. . . . .	336
1910.					
May 13	Empress. (75,904)	32	Charlottetown, P.E.I. . . . .	Schr., wood, sail. . . . .	26
1909.					
Oct. 11	Emily R. . . . . (121,817)	1	Digby, N.S. . . . .	Schr., wood, sail. . . . .	30
Oct. 14.	Empress of Ireland. . . . . (123,972)	3	Liverpool, G.B. . . . .	Schr., steel, steam. . . . .	8,028
Dec. 10.	Enterprise. . . . . (103,160)	13	Vancouver, B.C. . . . .	Sloop, wood, steam. . . . .	8
1910.					
May 4	Enterprise. . . . . (94,659)	22	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	69
Jan. 11.	Esquimo. . . . . (126,591)	1	Parrsboro, N.S. . . . .	Schr., wood, sail. . . . .	98
1908.					
Aug. 2.	Ethel G. . . . . (116,890)	5	Arichat, N.S. . . . .	Schr., wood, sail. . . . .	11
1909.					
July 8.	Eva May. . . . . (90,432)	8	Charlottetown, P.E.I. . . . .	Schr, wood, sail. . . . .	69
Oct. 24.	F. W. Pickels. (111,997)	7	Quebec, Que.	Schr., wood, sail. . . . .	386
Oct. 11.	F. W. Pickels. (111,997)	7	Quebec, Que. . . . .	Schr., wood, sail. . . . .	386
1910.					
June 21.	Eva Marie (88,370)	23	Victoria, B.C. . . . .	Schr., wood, sail. . . . .	77
1909.					
Dec. 20.	Farquhar. . . . . (126,205)	2	Vancouver, B.C. . . . .	None, wood, steam. . . . .	49
June 5.	Florence M. Smith (94,771)	20	Victoria, B.C. . . . .	Schr., wood, sail. . . . .	98
Oct. 11	Florence R. Hewson. (100,522)	16	Annapolis Royal, N.S. . . . .	Schr., wood, sail. . . . .	289



## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and found.	Remarks.
				\$
Havana, Cuba, Moss Point, U.S.A.	Pascagoula Bar, Mississippi, U.S.A.	Stranded. Master D. Geldert.		Part 1,500
Moss Point, U.S.A., Havana, Cuba.	Lat. 28° 47' N., Long. 85° 37' W., Gulf of Mexico.	Leaky, had to Jettison, part of deckload. Master D. Geldert.		Part (s) 1,500 (c) 1,000
Sydney, N.S., Wabana, Sydney N.S.	Sydney Harbour, N.S. . . . .	Stranded. Master, Jacobson..		No damage
Lunenburg, N.S., Boston, Mass.	12 miles W. S. W. of Little Hope Lt., N. Atlantic.	Lost sails and damaged in gale. Master, Lantz. . . . .		Part 125.
Yarmouth, N.S., Georgetown, P.E.I.	At the mouth of Bay of Fundy N.S.	Damaged by heavy weather Master.		Part 150
Murray Harbour, P.E.I., St. Peters, P.E.I.	St. Peter's Bar, P.E.I. . . . .	Stranded. Master, Thos Gosbee.		Total 800.
Meteghan, N.S., Salmon River.	Cape St. Mary, Bay of Fundy.	Stranded.		Part (s) 2,000 (c) 1,000
Liverpool, G.B., Quebec, Que..	Opp. Matane, St. Lawrence. . .	Thought to have struck sub- merged wreck.		
Van Anda, B.C., (Coastwise).	N. E. Point Texada Island Melaspina Str., B.C.	Stranded. . . . .		Part 1,500
Summerside, P.E.I., Port Hastings, C.B., Summerside, P.E.I.	N. E. of St. Peter's Island, 10 miles Hillsboro Bay.	Lost spars and sails . . . . .		Part 100
Apple River, N.S., St. John, N.B.	Off St. John Harbour, Bay of Fundy.	Lost foremast in squall		Part 450.
Port Hastings, N.S., White Haven, N.S.	White Haven, N.S. . . . .	Stranded.		Total 500
Charlottetown, P.E.I., Pictou, N.S., Harbour Breton, Nfld.	45 miles from Ramea Island. Nfld., N. Atlantic.	Seriously damaged in heavy weather.		
Mobile, Ala., Key West, Fla., Mobile, Ala., U.S.A.	Lat. 29° 40' N., Long. 87° 40' W., Gulf of Mexico.	Damaged while being towed from Key West to Mobile.		
Mobile, Ala., U.S.A., Havana, Cuba.	Harbour of Key West, Fla., U.S.A.	Dismasted in a hurricane. . .		Part
Victoria, B.C., Port Simpson, Behring Sea.	Oriflamme Passage, Chatham Sound, B.C.	Stranded		Trifling
Ladysmith, Vancouver, B.C. . .	New Westminster, B.C., Fraser River, B.C.	Fire. . . . .		Part 3,000
Halifax, N.S., New York, U.S.A.	30 miles S. E. of Cape Sable, N. Atlantic.	Lost part of deckload. . . . .		
Annapolis Royal, Mobile, Demarara.	Straits of Florida.	Foundered. . . . .		Total



STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship	Port of registry	How Rigged. — Iron or wood. — Steam or sailing	Register Tonnage.
1909.		Yrs			
Sept. 6.	Frankie King . . (126,062)	1	Charlottetown, P. E. I. . .	Schr., wood, sail.	27
1910.					
April 30.	G. Walter Scott (85,607)	27	St. John, N.B. . .	Schr., wood, sail . . .	75
Jan. 9.	Gaspé . . (112,349)	6½	Liverpool, N.S. . . .	Bgtn., wood, sail. . .	249
April 25	George Churchman.	36	New York, U.S.A. . . . .	Schr., wood, sail.	242
1909.					
Sept. 27.	Georgetown. .	7	(American).	Steel, steam. .	919
Sept. 29.	Georgian II. (117,113)	4	Vancouver, B.C. . . .	Barge, wood, sail. . . . .	649
Oct. .	Glenlui. . . (87,944)	26	Liverpool, G.B. .	Full rigged, iron, sail. . . . .	2,814
1910.					
Mar. 14.	Glyndon. (103,752)	13	Lunenburg, N.S. .	Schr., wood, sail.	99
1909.					
Nov. 13	Golden Rule. . (107,062)	12	St. John, N.B. . .	Schr., wood, sail. . . . .	55
Oct. 20	Gossip. . . . .	9	Gloucester, Mass., U.S.A. . . . .	Schr., wood, sail.	91
1910.					
Mar. 4	Grace . . . . (87,131)	27	St. John's, Newfoundland. . . .	Bgtn., wood, sail. .	129
May 10.	Grampian. . . (124,220)	2	Glasgow, G.B. . . . .	Schr., steel, steam. .	7,032
1909					
Sept. 19.	Greta. (107,972)	10	Dorchester, N.B. . . . .	Schr., wood, sail.	146
July 15.	Gwilyn. . . (126,470)		Vancouver, B.C. . . .	Wood, gasoline.	
Aug. 6	H. J. Logan . . . (111,678)	7	Parrsboro, N.S. .	Schr., wood, sail. . . . .	772
Dec 9	Halifax. . . . (96,794)	31	Halifax, N.S. . . . . . . . . . . .	None, wood, steam. . . . .	169
1910.					
May 5	Harold L. Berry. . . .	20	Charlottetown, P. E. I. .	Schr., wood, sail. . . . .	96
1909.					
Aug 25	Havelock . . (111,996)	9	Annapolis Royal, N.S. . .	Schr., wood, sail.	198
1910.					
Feb. 19.	Hazel Dollar (121,202)	5	Victoria, B.C. . .	Schr., steel, steam. .	2,803



## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks.
				\$
Pictou, N.S., Summerside, P.E.I., Tignish, P.E.I.	1 mile west of North Cape P.E.I.	Stranded, cause, loss of sails. Master, P. Kennedy. . . . .		Serious
Parrishoro, N.S., Parrishoro Roads.	Mouth of Parrishoro River Minas Basin.	Stranded.		Part 250
Rio de Janiero, Brazil, Sydney, C.B.	Atlantic Ocean. . . . .	Lost sails and damaged in heavy weather. Put into Halifax leaking.		Part 2,300
Windsor, N.S., Newark, N.J. U.S.A.	Spencer's Island, Bay of Fundy.	Stranded.		Part 1,000
Niagara Falls, N.Y., Pentecost Que.	Hare Island, St. Lawrence River.	Stranded.		Part 15,000
Vancouver, B.C., Bellingham Wash.	Gossip Island, Straits of Georgia, B.C.	Stranded in fog . .		Part 2,350
...	Rimouski, River St. Lawrence	Stranded in heavy gale		Part.
St. John, N.B., Boston, Mass., ..	Dow's Ledge, Sterrington, Me., Atlantic Ocean.	Stranded.		Part 400
Loading at Waterside, Albert Co., N.B.		Vessel sprang a leak and sank		Total 1,020
Gloucester, Mass., Fishing Banks.	Lat. 44° 36' N., Long. 57° 52' W., N. Atlantic.	Damaged in heavy weather Put into Liverpool for re- pairs.		Part 150
St. John's, Nfld., Halifax, N.S.	N. E. shore of Ironbound Isl. Atlantic Ocean.	Touched rocks. . .		Part 2,600
Glasgow, Quebec, Montreal	Cap a la Roche Channel River St. Lawrence.	Stranded		Part (s) 75,000 (c) 25,000
Dalhousie, N.B., New York U.S.A.	Goose Island, 1 mile W. of Faulkner's Island, Conn.	Stranded.		No damage
Campbellton, N.B., New York, U.S.A.	Off Georgia Banks, North Atlantic.	Vessel listed and lost, 200 bundles of lath.		
Halifax, N.S., Dartmouth, N.S.	Dartmouth, Halifax Harbour N.S.	Burnt. . .		Total 31,500
Vancouver, B.C., Oxford Bay Bute Inlet.	Oxford Bay, Bute Inlet	Burnt—Explosion of oil stove		Total 4,000
Boston, Mass., Port Hastings, Tignish, P.E.I.	Tadoussac Beach, Northern berland Co., N.B.	Stranded.		Total 1,800 700
Annapolis, Royal N.S., Laibarien.	Lat. 21° 80' N., Long. 77° 06' W., Cuba.	Stranded		Unknown
Hong Kong, Mororan, San Francisco.	Lat. 46° 36' N., Long. 160° 22' E., N. Pacific.	Damaged by deckload break- ing loose in heavy gale.		Part 500



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Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage.
1909.		Yrs			
Oct. 14.	Hazelwood. . . (92,372)	21	Chatham, N.B. . . . .	Schr., wood, sail. . . . .	99
Nov. 17.	Helen Shafner. . . (107,292)	10	Annapolis Royal, N.S. . . .	Schr., wood, sail. . . . .	180
Oct. 14.	Henry Nickerson. . . (94,856)	38	Parrsboro, N.S. . . . .	Schr., wood, sail. . . . .	70
Oct. 25.	Hestia. . . . . (98,053)	16	Glasgow, G.B. . . . .	Schr., steel, steam. . . . .	2434
1910.					
Mar. 23.	Hibernia. . . . . (100,347)	8	Maitland, N.S. . . . .	Schr., wood, sail. . . . .	298
April 18	Hilford. . . . . (122,426)	2	Halifax, N.S. . . . .	Schr., wood, steam. . . . .	26
1909.					
May 1.	Hope. . . . . (90,879)	21	Barrington, N.S. . . . .	Schr., wood, sail. . . . .	22
Sept. 15	Hoyle Bank. . . . . (108,761)	11	Glasgow, G.B. . . . .	Schr., steel, steam. . . . .	2150
Sept. 30.	Hoyle Bank . . . . . (108,761)	11	Glasgow, G.B. . . . .	Schr., steel, steam. . . . .	2150
1910.					
May 25.	Irisbrook. . . . . (114,002)	8	Glasgow, G.B. . . . .	Schr., steel, steam. . . . .	1778
1909.					
July 7.	Iroquois. . . . . (107,822)	9	Victoria, B.C. . . . .	Sloop, wood, steam. . . . .	94
Dec. 9	Isaac N. Veasey. . . . . (116,742)	22	Halifax, N.S. . . . .	Sloop, wood, steam. . . . .	60
1910.					
April 29.	J. B. Young. . . . . (126,584)		Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	100
1909.					
Nov. 28	J. D. Everett. . . . . (94,731)	20	Windsor, N.S. . . . .	Ship, wood, sail. . . . .	1957
Nov. 25.	J. Levesque. . . . . (107,680)	10	Quebec, Que. . . . .	Schr., wood, sail. . . . .	62
1906.					
Oct. 4.	Jacques. . . . . (85,560)	23	Yarmouth, N.S. . . . .	Schr., wood, sail. . . . .	58
1909.					
Jan. 17	James W. Cousins. . . . . (111,525)	9	Digby, N.S. . . . .	Schr., wood, sail. . . . .	87
Dec. 20.	Jean. . . . . (116,916)	4½	Liverpool, N.S. . . . .	Schr., wood, sail. . . . .	190
Nov. 17	Jessie Brown. . . . . (37,514)	40	St. John's, Newfoundland. . . . .	Schr., wood, sail. . . . .	56



## SESSIONAL PAPER No. 23.

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved	Remarks
				\$
New York, St. Pierre, Miq. . .	Port La Tour, N.S. . .	Grounded. . .		Part 600 1,500
New York, N.Y., Halifax, N.S.	Barrington Harbour, N.S. . .	Stranded. . .		Part 1,200
Charlottetown, P.E.I., Glace Bay, N.S.	Pownal Bay, P.E.I. . . . .	Stranded. . .		Part 350
Glasgow, G.B., St. John, N.B.	Old Proprietor Ledge, off Grand Manan, N.B.	Stranded. 3rd officer. . .	35	Total (s) 83,000 (c) 68,000
Trinidad, W.I., Barbados. . .	Lat. 16° —' N., Long. 60° 40' W., N. Atlantic.	Lost bowsprit in heavy weather.		Part
Halifax, N.S., Malton, N.S. . .	Eastern Passage, Halifax Harbour, N.S.	Stranded. . .		Part (s) 1,000 (c) 1,400
Port La Tour, Barrington, N.S.	Calm Point, Cape Sable Isld., N.S.	Stranded. . .		Total 450.
Sheet Harbour, N.S., Manchester, G.B.	Indian Point, Sheet Harbour, N.S., Atlantic Ocean.	Stranded. . .		Part 2,500
Halifax, N.S., Manchester, G.B.	Brigg Rock, N.S., Atlantic Ocean.	Stranded. Compasses out of order.		Part 12,680
Parrsboro, N.S., Sharpness, G.B.	Black Rock, Minas Channel, Bay of Fundy.	Stranded. . .		Part (s) 20,000 (c) 2,000
Sidney, B.C., Nanaimo, B.C.	Bednell Harbour, South Pender Island, B.C.	While going astern, struck large boulder.		Part 795
North Sydney, Beaver Harbour, Chester, N.S.	E. S. E. 4 miles from Ship Harbour, N.S.	Engine broke down. . .		Part 375.
Lunenburg, Canso, Magdalen Islands.	5 miles E. of South Point Lt. Mag. Islds., Gulf St. Lawrence.	Stranded. . .		Total (s) 12,000 (c) 3,000
Gulf Port, U.S.A., Rio Janeiro, Brazil.	Lat. 27° 21' N., Long. 72° 18' W., Atlantic Ocean.	Touched bar on leaving Gulf Port.		Total 53,000
Bersimis, Que., Bic, Que. . .	West Reef, Barnabe Island, River St. Lawrence.	Stranded. . .		Total 2,000
Pictou, N.S., Newcastle, N.B.	Miramichi Bay, N.B., Gulf St. Lawrence.	Stranded. . .		Total 600
Digby, N.S., Yarmouth, N.S. Fishing.	Oldman Ledge, Lobster Bay, 1½ miles S. S. E. of Pease Island, Bay of Fundy.	Stranded. . .		Total (s) 5,000 (c) 1,200
St. John's, Nfld., Oporto, Spain	North Atlantic Ocean. . . . .	Broke main gaff and had sails torn in squall.		Part
North Sydney, Pt. Hawkesbury, Charlottetown.	Pictou Harbour, N.S.	Stranded. . .		Part 305



1-2 GEORGE V., A. 1911

STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood — Steam or sailing.	Register Tonnage
1909.		Yrs			
Feb. 26.	Jessie L. Smith. . . (107,646)	10	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	100
1910.					
May 11.	John A. Beckerman.	33	Boston, Mass., U.S.A. . . . .	Schr., wood, sail. . . . .	376
1909.					
Nov. 8.	John S. Bennett. . . (107,288)	9	Liverpool, N.S. . . . .	Bktn., wood, sail. . . . .	299
July 8.	Jubilee. . . . . (92,458)	22	Charlottetown, P.E.I. . . . .	Schr., wood, sail. . . . .	76
1910.					
Feb. 1.	King Josiah. . . . . (125,965)	2	Parrsboro, N.S. . . . .	Schr., wood, sail. . . . .	147
1909.					
Nov. .	Kings Town. . . . . (98,883)	15	Hull, G.B. . . . .	Schr., steel, steam. . . . .	803
Aug. 1.	Latoska. . . . . (111,635)	8	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	99
Aug. 30.	Laura C. Zwicker. . . . (94,788)	20	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	85
Nov. 1.	Lanonia. . . . . (116,326)	6	Bridgetown, Ba'do's. . . . .	Schr., wood, sail. . . . .	266
Aug. 18.	Ledee Adele. . . . . (73,022)	32	Magdalen Islands, Que. . . . .	Schr., wood, sail. . . . .	50
Oct. 25.	Lewanika. . . . . (103,018)	15	Bridgetown B'do's. . . . .	Schr., wood, sail. . . . .	298
1910.					
Jan. 9.	Lilla B. Hirtle. . . . . (107,129)	11	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	99
Feb. 6.	Lord Templetown. . . (93,156)	24	Victoria, B.C. . . . .	Bque., steel, sail. . . . .	2,148
Feb. 2.	Louisa. . . . . (97,189)	18	Windsor, N.S. . . . .	Bktn., wood, sail. . . . .	880
1909.					
Nov. 24.	Loyal. . . . . (111,634)	9	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	99
Nov. 13.	Lulu. . . . . (92,779)	21	New Westminster, B.C. . . . .	Schr., wood, sail and gas. . .	16
Nov. 7.	Malwa. . . . . (107,309)	8	Windsor, N.S. . . . .	Bktn., wood, sail. . . . .	540
1910.					
Mar. 2.	Manchester Shipper . . (108,850)	10	Manchester, G.B. . . . .	Steel, steam. . . . .	2,542
1909.					
Sept. 20.	Marconi . . . . . (112,344)	7	Liverpool, N.S. . . . .	Bgtn, wood, sail. . . . .	198



## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian seaports ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty	Lives lost and saved.	Remarks.
				\$
Naples, Italy, St. John's, Nfld.	Lat. 41° 30' N., Long. 42° W., N. Atlantic.	Foundered. . . . .		Total 4,800
At Lambton's Wharf, St. John Harbour, N.B.		Collision with Dredge "Fielding."		Part 375.
New York, U.S.A., Halifax, N.S.	Near Black Isld., R.I., U.S.A.	Collision with schr. <i>Merrill C. Hart.</i>	6	Total 10,500
Sydney, N.S., Yarmouth, N.S.	Bras d'Or Lakes, ½ mile out- side Cape Isl. Light.	Stranded. . . . .		Part 350
Windsor, N.S., Boston, Mass. .	Ram's Head Bar, Boston Har- bour, U.S.A.	Stranded. . . . .		Part 1,800
Hull, G.B., Sydney, N.S. . . . .	North Atlantic Ocean . . . .	Sprang a leak. . . . .		Part 2,250
Halifax, N.S., Indian Ocean. . .	Lat. 36° 41' N., Long. 50° 48' W., N. Atlantic.	Sprang a leak and put into Bahia.		
Sydney, C.B., Pt. Hawkesbury, Fame Point, Que.	15 miles S. E. of East Pt. Light, P.E.I., Gulf St. Lawrence.	Foundered. . . . .		Total (s) 2,000 (c) 400
New York, Halifax, N.S. . . . .	5 miles S. E. from Chedabucto Head, N.S., Atlantic Ocean.	Struck submerged rock. . .		Part 2,000
Souris, P.E.I., Pictou, N.S. . . .	4 miles N. E. Pictou Island, Northumberland Straits.	Stranded. . . . .		Total 300.
Sydney, N.S., St. John, N.B. . . .	E. by S. Betty Island, N.S. . .	Stranded. Anchors dragged in N. W. gale.		Total (s) 4,000 (c) 1,500
St. Martins, D.W.I., Lunen- burg, N.S.	Lat. 40° N., Long. 59° W., N. Atlantic.	Damaged—lost sails, &c. . .		Part 550
Sidney, B.C., San Francisco. . .	Lat. 35° 46' N., Long. 157° 16' W., N. Pacific.	Lost fore lower T. G. yard during squall.		Part 150
Barbados, Boston, U.S.A. . . . .	Lat. 27° 12' N., Long. 67° 26' W., Atlantic Ocean.	Lost spars and rigging.		Part
Richibucto, N.B., Vineyard Haven.	Vessel arrived at Vineyard Haven, 6th Dec., reported	loosing about 150,000 lath in Bay of Fundy.		
Vancouver, B.C., Massett, Prince Rupert.	3½ knots W. of Lucy Island Lt., Chatham Sound, B.C. ?	Burnt. Open light fell in bilge, causing explosion.		Total (s) 2,500 (c) 300
Grand Pabos, Port Hawkes- bury, New York.	Nantucket Shoals, North Atlantic.	Stranded.		Trifling
Manchester, B.G., Halifax, N.S.	Lat. 47° 32' N., Long. 34° 5' W., N. Atlantic.	Broke propeller blade . . .		Part
Santa Domingo, Carrabella, Fla.	Gulf of Mexico, N. Atlantic. .	Damaged in heavy weather. .		Part 6,000



STATEMENT of wrecks and casualties reported as having occurred to British, going vessels in other waters, for the twelve

Date of casualty.	Name of ship	Age of ship.	Port of registry.	How Rigged Iron or wood. — Steam or sailing.	Register Tonnage.
1909.		Yrs			
Aug. 19	Margaret (122,123)	2	Halifax, N.S. . . .	Schr., wood, steam . . .	100
1910.					
Mar. 15	Marguerite. (111,894)	5	Weymouth, N.S. . . .	Schr., Wood, sail. . .	98
1908					
Oct. 2.	Marie Oliva (88,328)	20	Quebec, Que. . . .	Schr., wood, sail. . . .	40
1909.					
Oct. 18.	Marsala. . . .	20	Gloucester, Mass., U.S.A. . . . .	Schr., wood, sail. . . .	54
Sept. 18.	Maritana. (100,710)	6	Pictou, N.S. . . . .	Schr., wood, sail. . . .	490
Nov. 16	Mascotte . . . (103,459)	13	Lunenburg, N.S. . . .	None, wood, steam. . . .	24
1910.					
April 14.	Maude. . . . (64,136)	38	Victoria, B.C. . . .	Schr., wood, steam. . . .	94
April 19.	Mersey. . . . (116,914)	5	Liverpool, N.S. . . . .	Schr., wood, sail. . . .	191
1909.					
Sept. 14.	Mignonette. . . (92,332)	23	Quebec, Que. . . .	Schr., wood, sail. . . .	139
Nov. 16	Minnie F. Crosby. . . (126,103)	1½	Halifax, N.S. . . . .	Schr., wood, sail. . . .	119
Nov. 24.	Minnie F. Crosby. (126,103)	1½	Halifax, N.S. . . . .	Schr., wood, sail. . . .	119
1910.					
Jan. 10	Minnie F. Crosby. . . (126,103)	2	Halifax, N.S. . . . .	Schr., wood, sail. . . .	119
1909.					
Dec. 2.	Mizpah. . . . (111,701)	8	Lunenburg, N.S. . . .	Schr., wood, sail. . . .	100
July 23.	Montrose. . . . (108,257)	12	London, G.B. . . . .	4 m. schr., steel, steam. . .	3,968
Nov. 4.	Montrose. . . . . (121,897)	3	Shelburne, N.S. . . .	Schr., wood, sail. . . .	198
1910.					
Jan. 8.	Montrose. . . . . (121,897)	3	Shelburne, N.S. . . .	Schr., wood, sail. . . .	198
1909.					
Nov. 28.	Monte uma . . . (110,604)		Liverpool G.B. . . . .	F & A, steel, stern. . . .	5,358
Nov. 16.	Moravia. . . . . (107,656)	10	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	99



## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks.
				\$
Halifax, N.S., St. Peter's, N.S.	Thrum Cap Beach, Halifax Harbour, N.S.	Stranded.		Part 5,000
Yarmouth, N.S., St. Kitt's, W.I.	Hog Reef, North side of Bermuda, Caribbean Sea.	Stranded.		Part
Ha! Ha! Bay, Quebec, Que. . .	St. Denis, Isl., Que., River St. Lawrence.	Stranded.		Total 1,000
Gloucester, Mass., Fishing Banks.	30 miles W. S. W. West Light on Sable Isl., N. Atlantic.	Damage d by heavy sea. . .		Part 200
Mobile, U.S.A., Caibrian, Cuba.	Lat. 25° 16' N., Long. 87° W. Gulf of Mexico.	Abandoned at sea.		Total
Running as a Ferry in Port of Lunenburg.	At Maas Ferry Wharf, Lunenburg, N.S.	Damage d by fire. .		Part 300
Port Angels, Wash., N. Pacific.	Ediz Hook Light, 1 1/3 S., 48 8' 40" N., 123° 26' W.	Stranded.		Part
Halifax, N.S., San Blas, New York, U.S.A.	Lat. 36° 31' N., Long. 73° 1' W., N. Atlantic.	Broke fore-mast and lost sails.		Part 125.
Gaspé, Montreal. . . . .	White Isl. Reef, River St. Lawrence.	Stranded.		Total 1,500 1,000
Chatham, N.B., Hawkesbury, N.S., New York, U.S.A.	2 miles from E. Point, P.E.I., Gulf St. Lawrence.	Lost jib and part of deck load.		Part (s) 100 (c) 100
Chatham, N.B., Hawkesbury, N.S., New York, U.S.A.	75 miles W. from S. of Cape Sable, Bay of Fundy.	Lost fore sail and part of deck-load Boat damaged.		Part (s) 100 (c) 100
Halifax, N.S., Hamilton, Bermuda.	Lat. 37° 10' N., Long. 58° 2' W., N. Atlantic.	Sprang leak and lost sails in gale.		Part
Cardigan, P.E.I., Shelburne, N.S., Boston, Mass.	Peaked Hill Bar, Cape Cod, Mass., U.S.A.	Stranded.	3	Total (s) 4,000 (c) 1,500
London, Antwerp, Montreal. . .	Lat. 46° 40' N., Long. 52° 23' W., N. Atlantic.	Collision with an iceberg. . . .		No damage
St. John's, Nfld., Pernambuco.	Lat. 40° 58' N., Long. 44° 6' W., N. Atlantic.	Lost jib-boom and damaged sails.		Part 150
Pernambuco, St. John's, Nfld.	Holy Rood Beach, St. Mary's Bay, Newfoundland.	Stranded in fog		Total
Antwerp, Quebec, Montreal . . .	Cap a la Roche, River St. Lawrence.	Touched		No damage
Boston, Mass., Liscomb, N.S., St. Pierre, Miq.	About 70 miles W. by N. from St. Pierre, Atlantic.	Damaged by heavy weather. .		Part 150



1-2 GEORGE V., A. 1911

STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship. Yrs	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage.
1910.		Yrs			
April 8.	Morelight. . (122,121)	3	Halifax, N.S. . . . .	Schr., wood, sail. . . . .	52
1909.					
Nov. 16.	Myrtle V. Hopkins. . . . (94,853)	20	Liverpool, N.S. . . . .	Schr., wood, sail. . . . .	158
Sept. 30.	Mystery. . . . (94,816)	19	Victoria, B.C. . . . .	None, wood, steam. . . . .	39
1910.					
April 1.	Newington. (110,697)	11	Vancouver, B.C. . . . .	Sloop, steel, steam. . . . .	61
April 27.	Niagara. . .		U.S.A. . . . .	Schr., iron, sail. . . . .	78
Feb. 17.	Norwood. (100,332)	18	Maitland, N.S. . . . .	Ship, wood, sail. . . . .	1,597
1909.					
Dec.	Ocomo . . . (76,947)	33	London, G.B. . . . .	Schr., iron steam. . . . .	1,172
Sept. 2.	Ocean. . .	1½	Sandefjord, Norway. . . . .	Schr., steel, steam. . . . .	2,459
Dec. 30.	Olinda. . . (107,275)	11	Liverpool, N.S. . . . .	Bgtn., wood, sail. . . . .	199
Sept. 12.	Oliver F. Kilham. . . .	12	Beverly, Mass., U.S.A. . . . .	Schr., wood, sail. . . . .	43
Dec. 10.	Olympic. . . (unregistered)		Vancouver, B.C. . . . .	Yawl, wood, gasoline . . . . .	34
Aug. 18.	Orinoco . .	7	Gloucester, Mass. . . . .	Schr., wood, sail. . . . .	89
May 17.	Osprey. . . . (116,645)	13	Shelburne, N.S. . . . .	Schr., wood, sail. . . . .	90
Aug. 29.	Otis Miller. . . (103,268)	13	Dorchester, N.B. . . . .	Schr., wood, sail. . . . .	98
Nov. 26.	Otranto. (129,123)	16	Quebec, Que. . . . .	None, wood, steam. . . . .	24
1910.					
Feb. 16.	P. J. McLaughlin . . . . (125,968)	1	Parrshoro, N.S. . . . .	Schr., wood, sail. . . . .	147
Feb. 12.	Peerless. (85,371)	28	Yarmouth, N.S. . . . .	Schr., wood, sail. . . . .	278
May 31.	Pejepscot. .	3	Bath, Me., U.S.A. . . . .	None, wood, steam. . . . .	79
Mar. 15.	Picnic. . . (126,622)	1	Vancouver, B.C. . . . .	None, wood, gasoline. . . . .	3
1909.					
Oct. 11.	Pleroma. . . (85,641)	26	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	95
Nov. 30.	Pleroma. . . (85,641)	26	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	95
Dec. 4.	Princess Ena. . . . (122,387)	2	Victoria, B.C. . . . .	Schr., steel, steam. . . . .	827



## SESSIONAL PAPER No. 23

Canadian and foreign sea-going vessels in Canadian waters and to Canadian seaports ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks
				\$
Halifax, N.S., Fourchu, N.S.	St. Peter's Bay, N.S. . . . .	Stranded. . . . .		Part 2,500
Halifax, N.S., Sydney, N.S. . . .	Entrance to Sydney Harbour, N.S.	Stranded. . . . .		Total 4,500
Vancouver, B.C., Bellingham, Wash.	Lat. 48° 53' 50" N., Long. 123° 20' 20" W., Straits of Georgia.	Stranded. . . . .		Part 15,000
Victoria, Comox, Victoria. . . .	50° 0' 0" N. Lat., 124° 49' 30" W. Long., Ragged Islands, B.C.	Stranded. . . . .		Part
Gloucester, Mass., Canso, N.S. . .	S. W. part of Cranberry Isld., N.S.	Stranded. . . . .		Total
Barbados, Boston, Mass. . . . .	Ship Shoals, Cape Charles, Va., U.S.A.	Stranded. . . . .		Total
St. John, N.B., Halifax, N.S., Bermuda.	North Atlantic Ocean. . . . .	Damaged in hurricane and loss of deckload.		Part 1,000
Montreal, Que., Sydney, N.S. . .	Red Island, Que., River St. Lawrence	Stranded. . . . .		Part 21,000
St. John's, Nfld., Pernambuco.	Lat. 45° 50' N., Long. 52° 13' W., North Atlantic.	During a heavy gale the Bow- sprit was sprung and Jib- boom and Jibs carried away		
Salem, Mass., Port Midway, N.S., Fishing.	Western Bank, Lat. 43° 37' N., Atlantic Ocean.	Damaged on fishing ground by heavy weather.		Part 150
Seattle, Wash., Vancouver, San Diego, Cal.	71 miles S. W. of Flattery, N. Pacific.	Lost jib and mizzen sail in gale.		Part 200
Gloucester, Mass., Argyle, N.S., Canso, N.S.	25 miles S. W. of Sambro, N. Atlantic.	Foundered at sea. . . . .	11	Total (s) 10,000 (c) 3,000
Liverpool, N.S., Barbados . . . .	Lat. 41° 24' N., Long. 62° 57' W., N. Atlantic.	Damaged by gale and had to jettison.		Part
Diligent River, N.S., Vineyard Haven, Mass.	Off Cape D'Or, Parr-boro, Bay of Fundy.	Sprung a leak . . . . .		Part 1,000
Bonaventure, Que., Petite Rocher, Que.	Bonaventure Bar, Bay de Chaleurs, Gulf of St. Law- rence.	Stranded. . . . .		Total 6,000
Parrsboro, N.S., New York, U.S.A.	Deer Island, Me., U.S.A. . . . .	Collision with schr. <i>Alaska</i> . .		Part 250
Weymouth, N.S., Boston, New York.	While entering Portsmouth, N.H. Harbour.	collided with schr. <i>Evelyn M.</i> <i>Thompson.</i>		
Bath, Me., U.S.A., Gt. Salmon River.	Cape Spencer Light House, 1 mile, Bay of Fundy.	Stranded. . . . .		Total 45,000
Vancouver, B.C., Bute Inlet, B.C.	17 miles above Lund, Lewis Channel, B.C.	Burnt. . . . .		Total
Jamaica, Caymand Brai, Savannah, Ga.	Straits of Florida. . . . .	Damaged in hurricane. . . .		Part
Halifax, Mobile, Savannah. . . .	About Lat. 30° 40' N., Long 80° 20' W., N. Atlantic.	Lost part sails. . . . .		
Victoria, B.C., Ketchikan, Ladysmith.	Dixon's Entrance, B.C. . . . .	Lost propeller and two boats smashed.		Part 600



1-2 GEORGE V., A. 1911

STATEMENT of wrecks and casualties reported as having occurred to British, going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage
1910.		Yrs			
Oct. 19.	Princess May. . (109,860)	21	Vancouver, B.C. . . .	F. & A., steel, steam. . . .	892
Dec. 7.	Princess May. . (109,860)	21	Vancouver, B.C. . . .	F. & A., steel, steam. . .	892
June 26.	Puritan. . . . . (106,875)	12	Middlesboro, G.B. . . . .	Schr., steel, steam. . .	2,553
Sept. 3.	Queen City. . (103,482)		Victoria, B.C. . . . .	Schr., wood, steam. . . .	243
July 28.	Raven. . .		Christiana, Norway. .	Schr., iron, steam. . .	795
1910.					
April 13.	Reynard. . . (111,677)	9	Parrsboro, N.S.	Bktn., wood, sail. . . . .	560
1909.					
Aug. 17.	Rhoda. . (103,201)	13	Liverpool, N.S. . . .	Schr., wood, sail. . . . .	199
Sept. 14.	Rolf	33	Christiana, Norway. .	Bk., wood, sail . . . . .	1,170
1910.					
May 31.	S. T. Co., No. 2. .	3	Bath, Me. U.S.A. . .	Schr., wood, sail. . .	430
May 31.	S. T. Co., No. 4. .	3	Bath, Me., U.S.A. . .	Schr., wood, sail.	421
April 28.	St. Cr i . (94,739)	20	Windsor, N.S. . . . .	Bktn., wood, sail.	653
1909.					
Nov. 23.	St. Helena. . . . . (103,500)	13	Lunenburg, N.S. .	Schr., wood, sail. . . . .	99
Aug. 19.	Sandsend. . . . . (112,413)	10	W. Hartlepool, G.B.	Schr., steel, steam.	2,480
Sept. 2.	Savoy. . . . . (104,887)	14	London, G.B. . . . .	Kitch., steel, steam .	184
Dec. 19.	Scotia. . . . . (122,423)	3	Halifax, N.S. . . . .	Schr., wood, steam. . . .	268
June 23.	Scylla. . . . . (85,737)	26	Halifax, N.S. . . . .	Schr., wood, sail. . . . .	95
Sept. 3	Selkirk. . . . . (107,095)	11	Victoria, B.C. . . . .	Schr., wood, steam. . . .	86
Nov. 10.	Shawatlans. . . . . (122,156)	4	Vancouver, B.C. . . .	None, wood, gasoline.	8
Nov. 11.	Smuggler. . . . .	7	Gloucester, Mass	Schr', wood, sail. . . . .	91
1910.					
Jan. 1	Stanley . . . (111,744)	7	Lunenburg, N.S. .	Schr., wood, sail. . . . .	99
1909.					
Oct. 21.	Stanley Mac. . . . (90,843)	22	Charlottetown, P.E.I. .	Schr., wood, sail. . . . .	99
Sept. 9.	Stetson . . . (121,981)	8	Victoria, B.C. . . . .	None, wood, steam. . .	17



## SESSIONAL PAPER No. 23.

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved	Remarks.
				\$
Skagway, Alaska, Port Simpson, B.C., Prince Rupert.	Kestrel Rock, Prince Rupert, Chatham Sta.	Struck submerged log.	Part	7,000
Skagway, Alaska, Alert Bay, Vancouver, B.C.	Johnston Straits, B.C.	Stranded.	Part	
Barry, G.B., Ladysmith, B.C., Nome, Alaska.	Lat. 63° 30' N., Long. 166° W. Behring Sea.	Bows stove in and loss of all propeller blades in ice.	Part	15,000
Victoria, B.C., Rivers Inlet, Cannery, B.C.	Rivers Inlet, B.C.	Struck while making landing in fog.	Part	1,000
Norfolk, Va., U.S.A., Sherbrooke, N.S., Preston, G.B.	Sherbrooke, N.S.	Stranded.	Trifling	
Cayenne, Fr. Guiana, Havana, Cuba.	60 miles N. W. Neuva, Cuba.	Stranded.	Total	2,000
Liverpool, N.S., Havana, Cuba	Lat. 26° 36' N., Long. 61° 20' W., North Atlantic.	Jibboom and sails carried away.	Part	1,000
Liverpool, G.B., Newcastle, N.B.	Miramichi Bay, N.B.	Stranded.	Total	5,000
Bath, Me., U.S.A., Gt. Salmon River.	Cape Spencer Light-House, 1 mile S. Bay of Fundy.	Stranded in fog.	Part	4,500
Bath, Me., U.S.A., Gt. Salmon River.	Cape Spencer Light-House, 1 mile S. Bay of Fundy.	Stranded.	Part	4,000
New York, U.S.A., Yarmouth, N.S.	Lat. 41° 56' N., Long. 69° 15' W., Bay of Fundy.	Lost parts &c.	Part	2,000
Bonne Bay, Nfld., Halifax, N.S.	25 miles from Cape St. George, Sts. Belle Isle.	Damaged by shipping heavy sea.	Part	2,000
Newport, G.B., Pensacola, Fla., Amsterdam.	Lat. 43° 26' N., Long. 55° 03' W., N. Atlantic.	Deckload shifted and vessel damaged in gale.	Part	1,000
Quebec, Anticosti, Quebec.	Victoria Wharf, Lower River St. Lawrence.	Grounded.	No damage	
Canso, N.S., Port Huron, Halifax, N.S.	Mitchell's Bay, N.S.	Struck on and battered by rock.	No loss	
Halifax, N.S., New Bedford, Mass.	Middle Ground Shoal, Vineyard Sound.	Stranded.	No loss	
Vancouver, B.C., Ladysmith, B.C., Bellingham, U.S.A.	Houston Passage, B.C.	Stranded.	Part	2,950
Prince Rupert, Coastwise	Prince Rupert, B.C.	Boat.	Total	
Gloucester, Mass., Fishing	30 miles S.S.W. Virgin Rocks, Banks, Nfld., Atlantic.	Lost sails and damaged in hurricane.	Part	360
St. Martin, Lunenburg, N.S.	Lat. 20° 20' N., Long. 64° 15' W., Atlantic Ocean.	Leaky.	Part	1,000
Charlottetown, P.E.I., St. John's, N.S.	Entrance to Bras d'Or, C.B.	Stranded.	No damage	
Victoria, B.C., Ladysmith, B.C.	Barral Inlet, Stewart Channel, B.C.	Stranded.	Part	2,000



STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage.
1909.		Yrs			
Sept. 10.	Stigstad. . . . .	1	Christiana, Norway. . . . .	None, steel, steam. . . . .	2,488
Nov. 11.	Stratheona . . . . . (107,146)	11	Vancouver, B.C. . . . .	None, wood, steam. . . . .	376
1910.					
May 4.	Sweet Marie. . . . . (122,084)	3	Charlottetown, P.E.I. . . . .	Schr., wood, sail. . . . .	77
1909.					
Sept. 16.	Tanagra. . . . . (110,601)	10	St. John, N.B. . . . .	Schr., steel, steam. . . . .	2,159
Aug. 28.	Tees. . . . . (95,929)	16	Victoria, B.C. . . . .	Schr., steel, steam. . . . .	441
1910.					
Jan. 15.	Tobeatic. . . . . (126,036)	1	Liverpool, N.S. . . . .	Schr., wood, sail. . . . .	99
1909.					
July 9.	Torata. . . . . (107,651)	10	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	79
July 22.	Tyr. . . . .	.	Bergen, Norway. . . . .	None, steel, steam. . . . .	1,442
Aug. 15.	Uloa. . . . . (112,117)	4	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	79
Aug. 7.	Urania . . . . .	21	(Norwegian) . . . . .	None, steel, steam. . . . .	1,579
Oct. 28.	Valetta. . . . . (90,752)	24	St. John, N.B. . . . .	Schr., wood, sail. . . . .	99
Aug. 26.	Vere B. Roberts. . . . . (103,736)	11	Parrsboro, N.S. . . . .	Schr., wood, sail. . . . .	124
Sept. 14.	Viking. . . . . (103,130)	18	St. Andrews, N.B. . . . .	None, wood, steam. . . . .	87
1910.					
April 8.	Vivian B. Walters . . . . . (126,105)	2	Lunenburg, N.S. . . . .	Schr., wood, sail. . . . .	86
May 11.	Volturmo. . . . . (123,737)	4	London, G.B. . . . .	Schr., steel, steam. . . . .	2,208
1909.					
Dec. 14.	W. N. Zwicker. . . . . (111,724)	8	Lunenburg, N.S. . . . .	Tern Screw, wood, sail. . . . .	398
Oct. 10.	W. S. Fielding. . . . . (111,696)	8	Liverpool, N.S. . . . .	Schr., wood, sail. . . . .	199
1910.					
May 11.	W. S. Fielding. . . . . (unregistered)			Steam, steel. . . . .	
1909.					
Sept. 28.	Wacousta. . . . .	1	Sandefjord, Norway. . . . .	Schr., steel, steam. . . . .	1,998



## SESSIONAL PAPER No. 23.

Canadian and foreign sea-going vessels in Canadian waters and to Canadian seaports ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks.
				\$
Sydney, N.S., Three Rivers, Que., Sydney, N.S.	½ mile W. of St. Laurent Lt., River St. Lawrence.	Collision with <i>Sirene</i> .		Trifling
Chilliwack, B.C., New West- minster.	Opposite Pages Landing, Fraser River.	Struck a sunken snag.		Part 5,000
Charlottetown, P.E.I., Camp- bellton, N.B.	Lower Tabusintac Gully, N.B. Gulf of St. Lawrence.	Stranded		Part
St. John, N.B., Barry Dock, Newry.	½ mile below Victoria Basin, Newry, Ireland.	Stranded.		
Victoria, Quatsino, Victoria.	Quatsino Lt., B.C.	Struck uncharted rock.		Part 5,000
Fogo, Gibraltar.	Lat. 46° 05' N., Long. 43° 43' W., Atlantic.	Damaged in hurricane		Part 750
Bay St. George, Sloop Harbour Nfld., Whale Head, Labrador	Straits Belle Isle, Gulf St. Lawrence.	Stranded.		Total 5,000
Miramichi, N.B., W. Hartle- pool, G.B., Brown Head, Jo.	Boyd's Vin Island, N.B.	Stranded.		Part
Halifax, N.S., Indian & South Atlantic. Sealing.	Lat. 42° 28' N., Long. 60° W., N. Atlantic.	Damaged in heavy weather.		Part
N. Sydney, C.B., Montreal, Que.	White Island, River St. Law- rence, Que.	Stranded.		No damage
St. John, N.B., Boston, Mass.	Dansbury Ledge, Wood Isl., Me., U.S.A.	Stranded.		Total 1,950
Dorchester, N.B., Vineyard Haven, Mass.	Dorchester River, N.B., Bay of Fundy.	Grounded and put into Parrs- boro, N.S.		Part 600
Lying at Public Wharf at St. Stephen, N.B.		Sank at wharf.		Part 2,000
Lunenburg, N.S., Canso, N.S.	Near New Harbor, Guysboro Co., N.S.	Stranded.		Total 8,800
Halifax, N.S., New York, U.S.A.	Halifax Harbour, N.S.	Collision with dock.		No damage
Paysander, S.A., Montevideo, Philadelphia, U.S.A.	From 5° N. Lat. to Cape Mary, N.S., Atlantic.	Damaged in hurricane.		Part 2,500
Havana, Cuba, Ratan Isl.	200 miles N. Cape Antonio, Gulf Mexico.	Abandoned at Sea.		Total 9,000
Lawton's Wharf, St. John Harbour, N.B.		Collision with schr. <i>John A. Beckerman</i> .		No damage
Sydney, N.S., Quebec, Que.	Abreast Grosse Ile, St. Law- rence River.	Collision.		Part



1-2 GEORGE V., A. 1911

STATEMENT of wrecks and casualties reported as having occurred to British,  
going vessels in other waters, for the twelve

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage.
1910		Yrs			
May 28.	Waconsta . . . . .	2	Sandefjord, Norway.	Schr., steel, steam.	1,998
May 4.	Walter M. Young. . . . .		Eastport, Me., U.S.A. . . . .	Schr., wood, sail. . . . .	86
1909.					
Nov. 5.	Waterwitch. . . (122,025)		Liverpool, N.S. . . .	Schr., wood, sail.	190
Dec. 19.	Wellington . . . (86,105)	26	Newcastle, G.B. . .	Schr., iron, steam. . . . .	1,267
April 3.	Willie M (85,541)	25	Barrington, N.S. . .	Schr., wood, sail. . . . .	24
Aug. 18.	Winifred . . (106,987)	11	W. Hartlepool, G.B. . . . .	Schr., steel, steam. . . . .	1,801
June 5.	Yolanda. . (116,908)	2	Parrsboro, N.S. . .	Schr., wood, sail. . . . .	77

Number of vessels. . . . .	239
Number of lives lost. . . . .	85
Tonnage of vessels. . . . .	147,595
Amount of damage. . . . .	\$864,010



## SESSIONAL PAPER No. 23.

Canadian and foreign sea-going vessels in Canadian waters and to Canadian sea-months ending June 30, 1910.—*Continued.*

Port sailed from. Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks
			\$	
Montreal, Que., Sydney, N.S.	One mile W. of St. Paul's Isl., Stranded. S W Point, Gulf of St Lawrence		Part 12,000 Part 12,000	
Eastport, Me., Port Hawkesbury, N.S.	Amherst Harbour, Magdalen Isl., Gulf St. Lawrence.		Total	
St. John's, Nfld., Bahia. . . .	Lat. 42° 19' N., Long. 47° 15' W., N. Atlantic.	Damaged in heavy weather.	Part	
Union Bay, B.C., Ladysmith, B.C.	Ballenas Isl., Gulf of Georgia	Stranded	Trifling	
Barrington, N.S., Fishing.	Green Isl., Bear Point, Atlantic Ocean.	Stranded	Total 200	
Campbellton, N.B., Cardiff, Wales.	South Point, Anticosti Isl., Gulf St. Lawrence	Had to jettison part of deck load.		
Parrsboro, N.S Windsor N S. Boston Mass	Deer Island, Boston, Mass U S A	Stranded	Part	



STATEMENT of wrecks and casualties reported as having occurred to British,  
other waters, for the twelve  
INLAND

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register Tonnage.
1909.		Yrs			
1909.	Adrelexa. . . . . (90,702)	23	St. Catharines, Ont. . . . .	None, wood, steam. . . . .	14
Aug. 14.	Advance. . . . . (88,632)	25	Montreal, Que. . . . .	None, wood, steam. . . . .	358
Aug.	Advance. . . . . (88,632)	25	Montreal, Que. . . . .	None, wood, steam. . . . .	358
Aug. 22.	Alva D. . . . . (122,420)		Midland, Ont. . . . .	Wood, steam. . . . .	10
Dec. 11.	Ashtabula. . . . .	3	Fairport, U.S.A. . . . .	Schr., iron, steam. . . . .	2,670
Oct. 13.	Athabaska. . . . . (85,764)	26	Montreal, Que. . . . .	Schr., iron, steam. . . . .	1,545
1910.					
April 23.	Athabaska. . . . . (85,764)	26	Montreal, Que. . . . .	Schr., iron, steam. . . . .	2,349
1909.					
Dec. 17.	Augusta. . . . . (85,419)	26	St. Catharines, Ont. . . . .	None, wood, steam. . . . .	31
Sept. 13.	Bartlett. . . . . (124,288)	1½	Montreal, Que. . . . .	None, iron, steel. . . . .	41
	Blanche. . . . . (117,107)	5	Ottawa, Ont. . . . .	None, wood, steam. . . . .	18
1910.					
May 1.	Bothnia. . . . . (100,661)		Montreal, Que. . . . .	Schr., wood, steam. . . . .	478
1909.					
Oct. 7.	C. Sundt. . . . .	8	Bergen, Norway. . . . .	Schr., steel, steam. . . . .	684
1910.					
April 12	Carleton. . . . . (124,212)		Glasgow, G.B. . . . .	None, wood, steam. . . . .	830
June 15.	Casca. . . . . (103,919)	12	Victoria, B.C. . . . .	Wood, steam. . . . .	363
1909.					
Aug. 24.	Collingwood. . . . . (117,089)	2	Collingwood, Ont. . . . .	Schr., steel, steam. . . . .	3,480
Sept. 10.	Columbus. . . . . (117,039)	35	Sault Ste Marie, Ont. . . . .	None, wood, steam. . . . .	230
1910.					
April 11	D. D. Calvin. . . . . (83,298)	26	Kingston, Ont. . . . .	None, wood, steam. . . . .	483
1909.					
Dec. 9	Dredge No. 8 (111,384)		Port Arthur, Ont.	Dredge, wood, sail. . . . .	415
Nov. 15	Dronning Maul. . . . .	2½	Norwegian. . . . .	Schr., steel, steam. . . . .	673



## SESSIONAL PAPER No. 23.

Canadian and foreign vessels in Canadian waters and to Canadian vessels in months ending June 30, 1910.

## WRECKS.

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks.
				\$
Mountain Chute, Montreal River, Elk City	Lying at dock at Elk City.	Damaged by fire. . . . .		Part
Montreal, Que., Port Arthur Ont.	Gabriel Lock, Lachine Canal, Que.	Collision with wing wall. . . . .		Part
Montreal, Que., Port Arthur, Ont.	Head of Galop Rapids, St. Lawrence.	Steering gear broke and vessel stranded.		Part
Penetang, Ont., Logging. . . . .	Off Mink Rocks, Georgian Bay	Ran on rocks and foundered		Total
Ashtabula, Ohio, U.S.A., Port Burwell, Ont.	Port Burwell, Ont. . . . .	Stranded. . . . .		No damage
Owen Sound, Fort William. . . .	Flower Pot Isld., Georgian Bay.	Stranded. . . . .		Part (s) 40,000 (c) 15,000
Owen Sound, Fort William. . . .	Sault Ste. Marie, Ont. . . . .	Collision with dock, due to breaking of Signal Bell wire.		
Laid up for the Winter. . . . .	200 ft. south Muir's Dry Dock, Pt. Dalhousie.	Burnt. . . . .		Total 4,000
Erie, Pa., U.S.A., Kingston, Ont.	Morgan's Pt., Lake Erie. . . .	Grounded in dense fog . . . . .		No damage
Haileybury, Hilliardtown. . . .	Lying at Dock, Haileybury. . .	Burnt. . . . .		Total 6,000
Oswego, N.Y., Montreal, Que. . .	Lake St. Francis, Que . . . . .	Stranded. . . . .		Part 700
Quebec, Que., Niagara. . . . .	Niagara River, Lake Ontario.	Touched bottom. . . . .		Part 5,000
Prescott, Ont., Belleville, Ont., Fort William, Ont.	Bay of Quinte, Lake Ontario..	Struck Badgley's Shoal off Northport.		Part 10,000
Whitehorse, Dawson, Y.T. . . .	30 Mile River, Y.T. . . . .	Struck a rock. . . . .		serious casualty
Loraine, Ohio, U.S.A., Fort William, Ont.	Detroit River opposite Fort Wayne.	Collision with Str. <i>George L Craig</i> .		Part (s) 50,000 (c) 6,000
Sault Ste. Marie, Gargantua. . . .	At dock in Gargantua, Lake Superior.	Burnt. . . . .		Total 10,000
Tied up to pier off Garden Isld. Lake, Ontario.		Burnt. . . . .		Total 5,000
Fort William, Port Arthur. . . .	East Mutton Island, Thunder Bay, Lake Superior.	Foundered. . . . .	6	Total 35,000
Montreal, Erie, Pa., U.S.A. . . .	Niagara, Lake Ontario. . . . .	Grounded. . . . .		Part 5,000



1-2 GEORGE V., A. 1911

STATEMENT of wrecks and casualties reported as having occurred to British,  
other waters, for the twelve months

Date of casualty	Name of ship.	Age of ship	Port of registry.	How Rigged. — Iron or wood. Steam or sailing.	Register Tonnage
1909.		Yrs.			
Feb.	Ella H. . . (116,871)	25	St. Catharines, Ont.	None, wood, steam. . .	6
Sept. 13.	Emerson. . . (116,592)	6	Montreal, Que. .	None, iron, steam . . . .	188
Aug. 31.	Emily B. Maxwell. (112,362)	28	Port Hope, Ont. . . .	Schr., wood, sail. . .	327
Nov. 26.	Empress of Midland. . .		Newcastle, G.B. . . . .	None, steel, steam. . . . .	1,629
1910.					
May 13.	Fairmount . (112,276)	7	Montreal, Que. .	Steel, steam. . . . .	1,184
1909.					
Aug. 17.	Florida. . (107,894)	9	Montreal, Que. . .	None, wood, steam. . . .	128
Oct. 12.	George Stone.	16	Cleveland, Ohio, U.S.A. .	None, wood, steam. .	1,501
Sept. 2.	German. (86,122)	18	Duluth, Minn. . .	Steel, steam. .	1,875
Aug. 1	Glenellah. . . . (112,205)	4	Dundee, G.B. . .	None, iron, steam. . . .	1,454
Aug. 14.	Glengarry. . . (90,537)	38	Montreal, Que. . . .	None, wood, steam. . . .	215
1910.					
April 27.	Glenmount. . . . (122,408)	3	Montreal, Que. . . .	Steel, steam. .	1,246
1909.					
July 22.	Gilphie . . . . (85,370)	20	Ottawa, Ont	None, wood, steam. . . . .	35
1910					
June 13	Golden City. . . (71,248)	37	Toronto, Ont. . . . .	Wood, steam. . .	26
1909.					
Oct. 23.	Hamonic. . . (122,553)	New	Collingwood, Ont	Schr., steel, steam . . . . .	3,295
Nov. 29.	Hamonic. (122,553)	1	Collingwood, Ont.	Schr., steel, steam.	3,295
Sept. 16.	Hebron. . . . (107,613)	10	Ottawa, Ont. . .	None, wood, steam. . .	98
1910.					
Mar. 31.	Hiawatha (121,704)	5	Toronto, Ont. .	None, wood, steam. . . . .	81
1909.					
July 29.	Island Queen. . (107,078).		Toronto, Ont. .	None, wood, steam. . .	88
June 14	J. G. Gulley. . . . (107,946)	9	St. Catharines, Ont.	None, wood, steam. . .	39



## SESSIONAL PAPER No. 23.

Canadian and foreign vessels in Canadian waters and to Canadian vessels in ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved	Remarks.
				\$
	Crushed and destroyed while lying at her dock in Niagara River, by ice shove.			Total 400
Kingston, Ont., Port Dalhousie	3 miles E. of 30 Mile Point, Lake Ontario.	Grounded in dense fog.—30 tons coal jettisoned		No damage to vessel.
Manitowce, Wisc., Port Hope, Ont., Cleveland, Ohio	Entrance to Cleveland Har- bour.	Ran on breakwater . . . . .		Total 5,500
Fort William, Midland. . . . .	Sault Ste. Marie, Ont. . . . .	Lost propeller by striking against pier.		Part
Kingston, Fort William, King- ston.	Grasse Island, Detroit River, U.S.A.	Stranded.		No damage
Chambly, Sorel, Montreal. . . . .	Isle aux Veaux, St. Lawrence River.	Drifted ashore in a fog	..	No damage
Cleveland, Ohio, Upper Lake Ports.	Grubb Reef, Pelee Isl., Lake Erie.	Stranded. . . . .	6	Total
Erie, Pa., Cleveland, Ob. .	Big Point, above Am Soo	Grounded. . . . .	...	None
Montreal, Pt. Colborne, Fort William.	Pt. Colborne Breakwater, Lake Erie.	Steering gear damaged and struck breakwater.	..	Part 30,000
Kingston, Montreal. . . . .	Atwater Bridge, Lachine Canal, Montreal, Que.	Collided with bridge. . . . .	....	Total 18,000
Collingwood, Fort William, Kingston	St. Clair Flats, St. Clair River	Stranded.	...	
Warton, Ont., Lion's Head. .	Whippoorwill Shore, Lake Huron.	Stranded and burnt.	..	Total 4,000
Port Dalhousie, Port Colborne.	Welland Canal. . .	Stranded.	...	
Sarnia, Ont., Fort William.	G. T. R. Wharf, Point Edward St. Clair River.	Collision with barge <i>Chat- tanooga</i> .	..	Part 2,000
Sarnia, Ont., Sarnia, Ont. . . .	10 miles S. E. of Passage Isld., Lake Superior.	Broke two flanges. . . . .	....	Unknown
Oswego, N.Y., Montreal, Que.	Galops Rapids, River St. Law- rence.	Struck rock in rapids and sank at Iroquois.	..	Serious Part
Lying at dock at Port Carling, Muskoka.		Burnt. . .	....	Part 1,450
Toronto, Ont. . . . .	At Hanlan's dock, Toronto, Lake Ontario.	Broke shaft.	..	Part 100
	Burned at Sand Bay, 18 miles from Meldrum Bay, Lake Huron.		..	Total 7,000



STATEMENT of wrecks and casualties reported as having occurred to British,  
other waters, for the twelve months

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood. — Steam or sailing.	Register tonnage.
1909.		Yrs			
Oct. 15.	Jim Pullar. . . . (126,045)	15	Port Arthur, Ont. . . .	None, wood, steam. . . .	29
Aug. 15.	John J. Barlum. . . (107,490)	19	Sault Ste. Marie, Ont. . . . .	Schr., wood, sail. . . . .	1,125
1910.					
May 27.	Kaslo. . . . (107,827)	10	Victoria, B.C. . . . .	None, wood, steam. . . .	370
1909.					
Aug. 31.	Kathleen. . . . . (116,631)	4	Lindsay, Ont. . . . .	None, wood, steam. . . .	26
July 10.	Laprairie. . . . . (103,107)	40	Montreal, Que. . . . .	None, wood, steam. . . .	372
Aug. 3.	Mapleton. . . . . (123,961)	.	Sunderland, G. . . . .	Schr., steel, steam. . . .	1,139
Oct. 9	Mapleton. . . . . (123,961)	.	Sunderland, G.B. . . . .	Schr., steel, steam. . . .	1,139
Aug. 14.	Mary P. Hall. . . . (121,825)	11	Montreal, Que. . . . .	None, wood, steam. . . .	43
June 20.	Maude. . . . . (112,202)		Hamilton, Ont. . . . .	None, wood, steam. . . .	3
Sept. 17.	Meteor (107,950)	6	Cornwall, Ont.	None, wood, steam. . . .	32
1895.					
Oct. 11.	Minnehaha. . . . . (78,027)	13	Collingwood, Ont. . . . .	None, wood, steam. . . .	22
1909.					
Nov. 26	Newona. (125,470)		Newcastle, G.B. . . . .	chr., steel, steam . . . .	1,401
Oct. 27.	Omineca. . . . . (126,248)	½	Victoria, B.C. . . . .	None, wood, steam. . . .	379
1910.					
Mar. 6.	Ontario No. 1. . . . . (125,983)	3	Montreal, Que. . . . .	None, steel, steam. . . .	3,229
1909.					
Sept. 9.	Ossifrage. (107,488)	23	Sault Ste. Marie, Ont. . . .	None, wood, steam. . . .	303
Sept. 18.	Ossifrage. (107,488)	23	Sault Ste Marie, Ont. . . .	None, wood, steam. . . .	303
July 24.	Laprairie. . . . . (103,107)	40	Montreal, Que. . . . .	None wood, steam. . . .	372
Nov. 15	Ottawa. (111,443)	9	Ottawa, Ont. . . . .	None, steel, steam. . . .	1,440
Nov. 30	Ottawa. (116,391)	28	Sarnia, Ont. . . . .	Tug, wood, steam. . . .	420
1910.					
April 21.	Port Colborne (129,734)	1	New Castle, G.B. . . . .	None, steel, steam. . . .	1,305



## SESSIONAL PAPER No. 23

Canadian and foreign vessels in Canadian waters and to Canadian vessels in ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks
				\$
Port Arthur, Coasting	Dog Island, near Sturgeon Bay, Lake Superior.	Burnt. . .		Total 2,000
Sault Ste. Marie, Ont., Toledo, Ohio, U.S.A.	St. Clair River, opposite Sarnia, Ont.	Collision with str. <i>McKerchey</i> .		Part 200
Nelson, B.C., Kaslo, B.C. . .	Ainsworth Wharf, B.C. . .	Struck a submerged pile. . .		Part
Lindsay, Ont., Sturgeon Point	Sturgeon Point, Ont. . .	Struck by lightning & burned.		Total 6,000
Montreal, Que., Laprairie, Que.	½ mile above Victoria Bridge, Montreal Harbour.	Broke connecting rod of engine.		Part 250
Sunderland, G.B., Ft. William, Ont.	Detour, Lake Huron. . .	Stranded. . .		Part 6,500
Fort William, Kingston, Ont. .	Between locks 24 & 25 in the Welland Canal.	Steering gear disconnected. Str. collided with abutment.		Part
Kingston, Ont., Oswego, N.Y. .	American Narrows, St. Lawrence River.	Stranded. . .		Part
Hamilton, Ont., Niagara on the Lake.	Mouth of the Niagara River, Lake Ontario.	Broke crank shaft. . .		Slight
... ..	Plying in Cornwall Canal, ran into Lock 19.	... ..		Part 100
Parry Sound, Ont., Penetang, Ont.	East shore of Georgian Bay, Ont.	Ran on a rock and sank. . . .		Total 5,000
Newcastle, G.B., Montreal, Port Colborne.	Welland Canal, Montreal, between lock 5 and 6	Struck abutment. . . . .		Part 4,000
Victoria, B.C., Prince Rupert, Hazelton, B.C.	Skeena River, B.C. . .	Stranded. . . . .		Part 9,500
Charlotte, N.Y., Cobourg, Ont.	Charlotte, N.Y., U.S.A., Lake Ontario.	Grounded. . . . .		No damage
Chatham, Ont., River Excursion, Chatham, Ont.	4 miles below Chatham, on River Thames.	Stranded. . . . .		No damage
Chatham, Ont., Detroit, Mich.	River Thames, below Chatham, Ont.	Damaged by striking obstruction in River.		Part 290
Montreal, Que., Laprairie, Que.	Laprairie Wharf, Que. . .	Burnt. . . . .		Total 47,000
Fort William, Port Arthur, Depot Harbour.	15 miles from Passage Island, Lake Superior.	Foundered. . . . .		Total (s) 100,000 (c) 100,000
Cheboyegan, Mich., Duluth, Minn.	Lake Superior, Redcliffe, Wis.	Burnt. . . . .		Total
Fort William, Montreal, Que. .	Lock 10, Welland Canal. . . . .	Collision with lock wall. . . . .		Part 6,000



STATEMENT of wrecks and casualties reported as having occurred to British,  
other waters, for the twelve months

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged.  Iron or wood.  Steam or sailing.	Register tonnage.
1909.		Yrs			
Oct. 5.	Prefontaine. .... (103,557)	13	Montreal, Que. ....	None, wood, steam. ....	533
July 15.	Prefontaine. . (103,557)	13	Montreal, Que. ....	None, wood, steam. . .	533
Aug. 27.	Prescott. .... (107,900)	9	Montreal, Que. ....	None wood, steam. ....	648
1910.					
May 1.	Quebec ..... (122,405)	3	Montreal Que. ....	None, wood, steam. . . . .	2,013
1909.					
Aug. 31.	Rainbow. .... (103,926)	11	Peterboro Ont ....	N ne, wood, steam. ....	38
Sept 14.	Rapids King (122,407)	2	Montreal, Que	None, steel, steam. .	1,199
Sept. 5.	Rapids Queen (101,254)		Mon real, Que	None, steel, steam . . . . .	770
Oct. 14	Rideau King ..... (96,920)	16	Kingston, Ont. ....	None wood, steam. ....	197
Nov. 17.	Rome . . . . . (126,048)	30	Port Arthur Ont	None, wood steam. .	1,164
1910.					
June 13.	Samson. .... (111,629)	9	Quebec, Que. ....	None, wood, steam. ....	81
April 29.	Saronic. . (80,776)	28	Sarnia, Ont	None, wood, steam. . .	1,296
1909					
Sept. 27.	Sir C.T.Van Straubenzie (75,632)	4	St. Catharines Ont	Schr., woo l, sail.	317
Oct. 13.	Stormount. . (122,409)	3	Montreal, Que. . . . .	F & A steel, steam. ....	1,231
1908.					
July	Stranger. . . (77,916)	28	Port Hope, Ont. . . .	None, wood, steam. . .	17
1909					
Aug 8.	Turbinia . . (112,201)	5	Hamilton, Ont . .	None steel, steam. . .	1,060
1910.					
April 23.	Turret Chief. ....	14	Newcastle-on-Tyne, G.B. . . . .	3 mast, steel, steam. ....	1,197
April 15.	Wahcondah. .... (102,577)	7	Hami'ton. Ont. ....	Steel, steam. ....	996
1909.					
Nov. 6.	Welshman . . . (107,789)	10	Ottawa, Ont	None, wood, steam.	99
Dec 7.	Wexford. . . . . (87,342)	25	London, G.B. . . . .	Schr., comp., steam. ....	1,340



## SESSIONAL PAPER No. 23.

Canadian and foreign vessels in Canadian waters and to Canadian vessels in ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks.
				\$
Quebec, Que., Montreal, Que.	Lower end of Isle aux Barques River St. Lawrence.	Collision with unknown vessel	.....	
Montreal, Que., Sorel, Que., Quebec, Que.	Lake St. Peter, St. Lawrence River.	Starting of port shaft stem, caused vessel to leak and she was put ashore.	.....	No damage
Lying at Victoria Pier, Mont- real Harbour, Que.	.....	Burnt. ....	.....	Total 55,000
Montreal Que., Quebec, Que. . .	Quebec, Que. ....	Collision with str. <i>Cascapedia</i> ..	.....	Part 300
Stephenson's Landing, Peter- boro, Ont.	Below Halls Bridge, Honabue River.	Collision with str. <i>Otonabee</i> ....	.....	Part 50
Prescott, Ont., Montreal, Que.	Head of Long Sault, River St. Lawrence.	Grounded, broke rudder chain and quadrant.	.....	Slight
Prescott, Ont., Montreal, Que.	St. Lawrence River, above Lachine Rapids.	Rudder chain broke and vessel grounded.	.....	Part 3,000
Kingston, Ottawa, Ont. ....	White Hall Island, Rideau Canal.	Ran on rock. ....	.....	Part 1,000
Port Colborne, Sarnia, Fort William.	Lime Island, Mich., Soo River.	Burnt. ....	.....	Total
Montreal, Que., Laprairie. ....	1 mile above Victoria Bridge, River St. Lawrence.	Collision with a buoy. ....	.....	Part 280
Port Arthur, Duluth, Sault Ste. Marie.	Port Arthur, Ont. ....	Stern bearing let go and wheel damaged.	.....	
Toronto, Pt. Colborne, Cleve- land.	8 miles E. of Long Point, Lake Erie.	Collision with <i>City of Erie</i> . . .	4	Total 3,000
Sydney, N.S., Montreal, Que., Head of the Lakes.	1½ miles above Sisters' Light and abreast of Round and Slim Islands, St. Lawrence.	Struck a shoal. ....	.....	Trifling
Port Perry. ....	Lake Scugog, Ont. ....	Burnt. ....	.....	Total 1,500
Hamilton, Ont., Toronto, Ont., Charlotte, N.Y.	Charlotte Harbour, N.Y., U.S.A.	Damaged in collision. ....	.....	Part 3,000
Port Arthur, Goderich, Ont. . .	Goderich Harbour, Ont. ....	Stranded. ....	.....	Part 7,000
Fort William, Montreal. ....	Fort William, Ont. ....	Fracture of high pressure cylinder	.....	
Ottawa, Montreal. ....	Chute au Blondeau, Ottawa River.	Burnt. ....	.....	Total (s) 10,000 (c) 3,000
Port Arthur, Sault Ste. Marie, Goderich.	Sault Ste. Marie, Ont. ....	Grounded. ....	.....	Trifling



STATEMENT of wrecks and casualties reported as having occurred to British,  
other waters, for the twelve months

Date of casualty.	Name of ship.	Age of ship.	Port of registry.	How Rigged. — Iron or wood: — Steam or sailing.	Register Tonnage.
1909.		Yrs			
Nov. 11.	Wm. Bonfield ..... (126,077)	21	St. Catharines, Ont. ....	None, wood, steam. ....	13
Oct 19.	Winnana. .... (122,414)	2	Midland, Ont. ....	None, wood, steam ....	125
Aug 13.	Winnipeg ..... (106,711)	6	Montreal, Que . ....	Schr , wood, sail. ....	681
Dec 12.	Wiscahickon.....	2	Erie, Pa., U.S A. ....	None, steel, steam. ....	3,104
1910.					
April 8.	Wolverine. .... (112,295)	6	Winnipeg Man. ....	None, wood steam ....	189

Number of vessels.....	82
Number of tons. ....	63,970
Number of lives lost. ....	16
Amount of damage. ....	\$705,570



## SESSIONAL PAPER No. 23.

Canadian and foreign vessels in Canadian waters and to Canadian vessels in ending June 30, 1910.—*Continued.*

Port sailed from. — Port bound to.	Place where casualty happened.	Cause and nature of casualty.	Lives lost and saved.	Remarks.
				\$
Lying at her dock, Stromness, Ont.		Damaged by fire. ....		Part 2,000
Owen Sound, Ont., Tobermory Ont.	Tobermory, Ont. ....	Burnt. ....		Total
Murray Bay, Que., Oswego, U.S.A.	Cardinal Canal, River St. Lawrence.	Struck boulder in channel. ....		Part 450
Erie, Pa., Detroit, Mich., Duluth, Minn.	Outer Duck Island, Lake Huron.	Stranded. ....		
On dry dock at Selkirk, Man. . .		Burnt. ....		Part 9,000



